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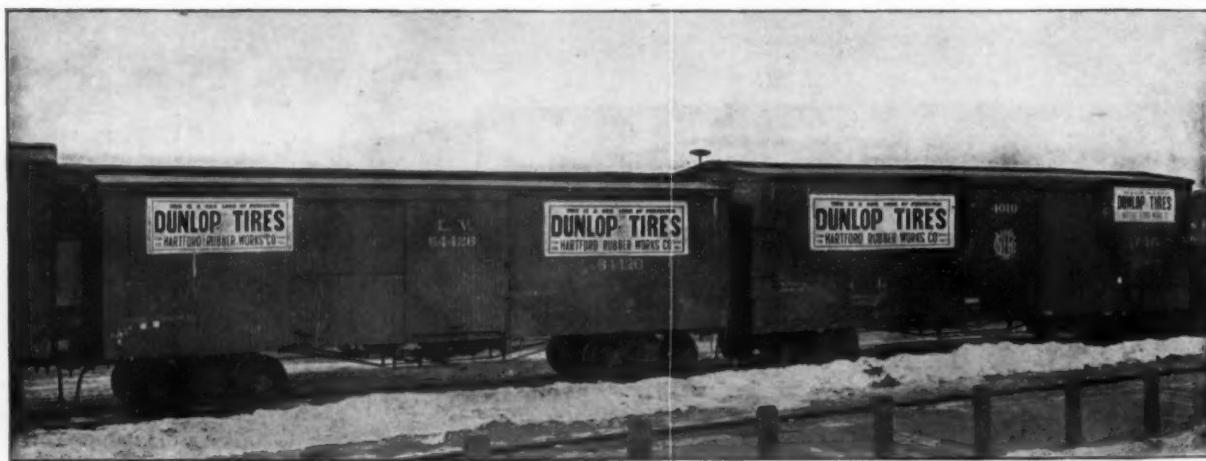
WEEKLY

NEW YORK—SATURDAY, FEBRUARY 11, 1905—CHICAGO

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THOMAS B. JEFFERY & COMPANY  
*Main Office and Factory, Kenosha, Wisconsin*



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# THE AUTOMOBILE

VOL. XII.

NEW YORK—SATURDAY, FEBRUARY 11 1905 -CHICAGO

NO. 6

## BRILLIANT OPENING OF COLISEUM SHOW.

Chicago's Fourth Annual Exhibition is Attractive and Imposing in Spectacular Features, with Strong Local and Mid-Western Tone—Striking Social Character of First Night.

*Espcially Reported for THE AUTOMOBILE.*

HEADQUARTERS of THE AUTOMOBILE, Chicago, Feb. 6.—Chicago's interest in the automobile show this year is best demonstrated in the ease and affability with which its thousands found their way to the Coliseum on the opening afternoon and evening. With an attendance 30 per cent. greater than the

record of a first evening at the Chicago show, it was better dressed than ever before, promenading the aisles under the myriads of electric lights, which made noon-day out of night, and which unconsciously lent to the strikingly social character of this first evening's exhibit.

In the early afternoon a sun spot, visible

to the eye through the typical smoke-fog that clouded Chicago, promised to vie with the afternoon opening of the show. But it was not flying machine weather, after all, and with the predicted snow holding off with rare consideration, the Coliseum lights became the attraction with the sunset.

Last year, even, Chicago was disposed to



CANOPY-PROTECTED ENTRANCE TO THE COLISEUM BUILDING AS IT APPEARED SUNDAY, AFTER OPENING NIGHT OF THE SHOW.  
Note fresh snowfall and cars with closed body and curtained Cape top.

enter the *porte cochere* in Wabash avenue with wide eyes, the width increasing with the passing of the ticket taker, and the limits of the optic muscles reached at the vistas opening away on floor and balconies of this giant exhibition hall. On this year's opening night, couples, quartets and automobile parties entered the show place, chatting, and merged into the increasing crowds inside with all the ease and certainty of those interested in an exhibition, which of a certainty would have certain interest for them.

Considering the mutability of human affairs, the show was in readiness worthy of the opening night's attendance. Some shipments had been delayed by the weather, which only a day or two before had begun to slacken a grip of 14 degrees below zero. It was cold enough to be dry, and there was snow enough to avoid dust, and the lake wind that cleared the skies Saturday afternoon had no terrors for prospective spectators of the evening.

Structurally, the Coliseum is recognized as adapted to the admirable disposition of automobile exhibits. Its 51,000 square feet of floor space lie in an exact rectangle, almost unbroken, and from the great arched girders supporting the roof incandescent lights blazed in rainbow arches through hundreds of flags of all nations draped below them. The balcony rails were in lights and colored bunting, while the electric signs marking individual exhibits everywhere combined to make every detail of every exhibit show to the best advantage and effect.

Between the exhibitor and the interested patrons of the show an understanding and fellowship was established at once. On a few cars were the placards in small lettering, "Hands Off" and "Please Do Not Touch," but when these were not respected there was no spirit of questioning, while for the most part the luxurious tonneaus on this opening night were filled with well-dressed men and women, bowing to passing friends in the aisles and chatting among themselves, as if in opera boxes between the scenes. One of the incidents of the opening was the presence of a big Chicago manufacturer of a specialty, sitting easily beside his exhibit, talking business with business inquirers and right and left saluting friends of both sexes in evening dress.

A birdseye glance at the exhibition as a whole gives to the person familiar with former shows an impression of compactness and simple good taste. There were fewer palms and ferns and more shiny rolltop desks of good make. More chairs and davenportts were adjuncts of the exhibits, and universally the exhibitors were in easy good humor, perhaps in considerable measure accounted for by the numerous cards breaking out here and there on machines, "Sold to John Doe." For a first afternoon and evening these cards were in remarkable numbers, lending color to Manager Miles' estimate of \$4,500,000 as the probable aggregate of the week's sales.

There are evidences everywhere that the

annual show of automobiles is a fixture of the industry and the trade. Apart from the general public's interest and its excursions, the exhibitor is conceding more and more to it. Ordinarily when a manufacturer has brought a machine worth \$5,000 to \$7,500 to a distant city, nursing it, coddling it, and finally leaving it under careful cover in an odd hour in the absence of spectators, it might be expected that his concern for it would extend beyond the possibility of Thomas, Richard and Henry's walking up to it, tossing off the sheeting, trundling it around into favorable lights and directing a camera lens at it.

But the newspaper reporter, his technical brother on the class paper, and the camera man for both of these are taking uncommissioned privileges with these machines on all sides, in the last moment, perhaps, to have the exhibitor come up, expressing regret that he was absent and unable to help with the camera and note-book campaign against his exceedingly valuable personal property.

To the Eastern man, the electric and gilded and tinted signs all through the exhibits are suggestive of a Western post-office guide. In the balconies, where the accessories to the automobile itself are housed, are names of merely local small cities, suggesting the Western character of this Chicago show, and in the main floor exhibits of the machines are enough more of these Western addresses to account for the 100 more machines here than were shown in Madison Square Garden. Three hundred and fifty machines are here—more than ever before have been assembled at an annual show in America, and with the machines and the side lines accessory, a valuation of \$1,000,000 has been placed upon the displays, in which 260 exhibitors are interested.

The observer finds this Chicago exhibition a more Western and semi-local show than last year. While the leading American manufacturers are represented, and while there are one German and two French exhibits in place, the Western man is in marked evidence, and the fact that he has been busy with modifications along conventional lines, in a large and small way, is easily recognizable by the merest passerby.

The old phraseologies regarding the patronage of home industries may apply strongly before the show is done. The cattle man from the cow country is here in his wolfskin overcoat, not so sure of sparkler and cooling system as he is of broncho, lariat and quirt, but interested, nevertheless, and looking prosperous enough and progressive enough to have demonstrations volunteered him on all sides.

For his interest and for the interest of the public at large is shown a greater variety of more luxurious vehicles than have ever been seen in Chicago. There is a preponderance of the larger types of vehicles, indicating that the public interest in the automobile has been by way of the runabout and the two-seated vehicle of the in-

expensive patterns. Between the luxuriously finished automobile and the studiedly unfinished chassis which so frequently stands beside its completed possibility, one may gauge the intelligent interest of the spectator when so much of his inspection goes to the chassis.

On the other hand, the possibilities of the open car and of the covered carriage body are demonstrated in at least one instance, where the adaptability of poplar under the hand of the carriage builder is set off against the metal body. In the rough, with only the merest attempt at leading and filling, one canopied car shows to the possible investor the possibilities of buying his chassis of the automobile manufacturer and having the carriage body built by the carriage builder. A handsome woman in handsome gown, with gloved finger in touch with the homely surfaces of an unfinished carriage body is one of the suggestive contrasts that make life for the automobile exhibition.

Some of the freakish speeding machines are here, attracting an almost morbid interest from the casual visitor. Cup trophies that have come to the makers of standard types are displayed attractively, speaking for speed, reliability and the small category of the virtues in machines. A novelty that is shown indicates the sales that have been made through the insertion of strips of cardboard thrust into a rack, with the name of the manufacturing company prominently displayed at the top.

Two trained nurses in Red Cross uniform, sitting near the main entrance to the building are suggestive at a first glance that life is a never-failing uncertainty. A closer inspection of the novel sight shows that an automobile that is on exhibition is to be raffled in June for the benefit of a Chicago hospital fund, and that tickets for a chance are to be had long enough in advance to allow the investor the keenest of cumulative anticipation for the next five months. Until that month of roses in the Middle West, every holder of a ticket may be a potential owner of a \$2,000 machine in the months before he would be most likely to need it.

As indicating the general interest of the Chicago show, the Chicago papers have given it more space than ever before, and some of them have made successful efforts at recognition in advertising, even to the extent of an "Automobile section" in the Sunday issues. For THE AUTOMOBILE, its corps of staff representatives has opened a headquarters in Parlor C of the Stratford Hotel, equipping the parlor with tables, writing materials and furnishing the services of a stenographer to such friends as desire to write letters from the headquarters.

Saturday night and Sunday, with a driving wind from the east, have brought snow to the depth of several inches, demonstrating the practical features of the extensive canopies at the entrance to the Coliseum. Wide space is made for the machines un-

loading passengers for the show, while as a canopied stretch before which demonstrations may be made to sheltered visitors, the shelter serves its best purpose.

In the out-of-door demonstrations this year a newer and more attractive class of cars are in use than ever before. These cars are equipped with the most enticing and comfortable of robes and blankets, contrasting with the snowbound streets and castellated fronts of the Coliseum itself. Inside, the great show place has been kept to comfortable temperatures, and in the north gallery a band has been stationed, to the music of which the promenading sight-seers have moved with pretty effects. The

## New Western Cars Shown at Chicago.

*Staff Correspondence.*

THE "AUTOMOBILE" HEADQUARTERS, CHICAGO, Feb. 6.—Viewed merely as a show of automobiles in a comfortable and artistic setting, the Chicago Show certainly leads the exhibition held in Madison Square Garden, New York. In its relation to the industry, however, as an exposition of the progress of construction embodied in the cars of 1905, it occupies quite a secondary position. The story has already been told by the Garden exhibit, even though with

A rational discussion of their merits must of necessity be brief for the subject matter is extremely limited and the threshing over of old straw is neither an intellectual inspiration nor a source of interest or profit to the onlooker, who in this case is the reader.

There are few freaks. The Chicago Show has in the past earned something of a reputation as a hospitable receptacle for cars that content—the designers. Instead, in-



GENERAL VIEW OF MAIN FLOOR AND BALCONIES OF THE COLISEUM, LOOKING NORTH, DURING SHOW WEEK

automobile horn, under the impulse of the small boy, has vied with the band now and then to the testing of the musician temper during favorite numbers, but there is no censure in word or look. Without the irrepressible small boy the Chicago show might have a tendency toward that stiffness which it so markedly does not have.

Technically considered by the automobile expert and critic, the Chicago show may give impressions that are short of the fulfilment of international interest, but under the myriad lights and tasteful decorative schemes of the Coliseum, it indicates unmistakably the homogeneous whole that has come of sustained effort.

the attendant discomforts of bad grouping, dirt, and overcrowding.

In actual numbers there are very few exhibitors of cars on the floor of the Coliseum who had not previously displayed their product at the Garden. When actual novelties in construction or notable additions to the already long list of domestic cars are considered the number is still less. In fact, the Chicago Show—more than creditable as a local or sectional exposition of automobiles and all that goes to make or equip them—emphasizes the Garden display as the great National show of the year. This really causes an embarrassment for those who purpose to record the novelties.

indeed, the additions to the market of purchasable cars which the show has made emphasize the tendency observable at the Garden; a tendency in the direction of rational design upon sanctioned lines of engineering progress.

The overloaded runabout has given place to a car in which the designer has considered at every step a load of more than two persons. The runabout is in evidence, though not preponderatingly, and it is a runabout, not a hermaphrodite touring car. It has no defence, for it needs none. Buyers are not assured that it will fulfill all the functions of a car which will meet with the requirements of a family, for the build-

er has invariably also provided a type of car that is of sufficiently strong construction and has power enough to carry an average load of four persons at a good rate of speed on American roads. And the increasing demand for the still heavier and more powerful touring car, pure and simple, is met adequately also. There is indeed a greater proportion of full-sized cars, many with bodies that will meet the varied weather conditions of American travel, than ever before shown.

Coming then to the less fundamental features of construction, form and style, there is notable advancement all along the line. A somewhat hasty detailed inspection of the cars exhibited, in the earlier days of the exposition, shows that never before had the purchaser such an opportunity for "a run for his money." Contraptions and movable junk heaps are practically non-existent. There are crudities in chassis, and amateurish workmanship in bodies; but real design and careful construction are no longer uncommon, rather the rule in fact. This is undoubtedly in a large measure due to the immense advance in parts construction that has developed in the automobile industry. It stands to reason that the plant that turns out thousands of special components and fittings is better able to employ ability in the drafting room and skill in the factory than the small maker, whose output of cars can be counted in tens or twenties. A judicious selection of market components has been made in many promising exhibits with results that could not be otherwise achieved without a great and really unwarranted outlay.

Following the practice now usual on this side and invariably abroad, many makers show chassis and separate parts. There is even a notable display of a body in the rough, by a local carriage builder who has set a high mark in artistic and sound construction in the West.

As at the last Chicago Show, the drift of large manufacturing concerns into the industry from the carriage and implement fields is notable.

Though every exhibitor has not a good location in the show, the geometric regularity of the floor space has made possible a good display of the bulk of the exhibits and yet permitted aisles comfortably wide. The outside exhibit of demonstration cars has increased in size here, as was the case at the Garden Show, and the exhibitors seem to take more care in having in readiness new machines and not old serviceable hacks. Heavy snowfall on Sunday and Monday has not made the demonstration work easy, and yet it is of benefit as showing the usefulness of the automobile under conditions that seriously interfere with horse-drawn street traffic.

A review of a number of exhibits of complete cars not shown at the Garden follows.

#### Woods 40-HORSEPOWER GASOLINE CAR.

In point of size, at least, the most important novelty at the show is the new 40-horsepower Simplex of the Woods Motor Vehicle Co., which has hitherto been engaged solely in the construction of electric carriages and commercial vehicles. One car, the first turned out of the shop, is shown fitted with an elaborately finished convertible body, which can be used as a limousine or open side-entrance car. The car is a large, powerful looking vehicle, built on modern French lines, embodying four-cylinder motor in front, sliding gear transmission and side-chain drive.

As no chassis is shown, a critical examination of details of construction is not possible. It is explained by the builders that it is a car without "stunts," representative simply of the generally accepted type of large car construction. Many of the component parts are of standard market patterns, such, for example, as the Panhard type side gear-shifting and brake levers. The motor has four separate cylinders, each 5 inch by 5 inch, with mechanically operated valves on the same side. The camshaft and 2 to 1 gears are enclosed, and the crankcase is divided horizontally below the bearings, so that the lower half is simply an oil reservoir. An internal cone clutch, with forward taper and springs under the leather face, is employed. Sliding gears with three speeds forward and reverse give direct drive on the high gear, and from the countershaft roller chains convey motion to the driving wheels. The usual clutch and brake pedals and side gear and emergency rear wheel brake levers are fitted.

The cooling system includes a front radiator with vertical spiral tubes, belt driven fan and water pump. Storage batteries and quadruple coil are wired to the jump spark plugs, the timer being carried on a vertical shaft driven by the motor through spiral gears.

Ball bearings are used in the outside brackets of the countershaft and on all the wheels. The other bearings are plain and of special bronze.

Carburation and lubrication also follow modern practice, the former automatic and the latter mechanical. The dash is of the now popular hollow form. It will thus be noted that the car is along orthodox lines, and presents no radical features. It simply adds another to the growing list of cars of high power of domestic origin in which the "safe and sound" policy of design is followed.

Long experience in body building in electric vehicles of the purely carriage types has given a greater chance for originality in this component. The side-entrance door does not follow the Continental example in opening, but is hinged in front. Details of interior finish are quite good. The general exterior lines are also good, and not ostentatious, but the color work is rather marred by an excessive use of the striping

brush, which, in a car of this size and class, detracts from the general substantial appearance.

#### BEVEL GEAR DRIVEN ELECTRIC.

In electric vehicles at this stand, which, by the way, is quite inclusive, is a new runabout with bevel gear drive and motor suspended in the center below the body, where it is least subject to road shocks and lesser jars. The battery is a 20-cell Exide, which the builders rate as equal to fifty miles of road work on a single charge. The body is of the piano-box type, with hood, and is carried on 3-4 elliptic springs at both ends. The control gives a range of four speeds and reverse. Two passengers are carried on the 36-inch seat. The wheel-base is 62 inches, and the listed weight 1,250 pounds.

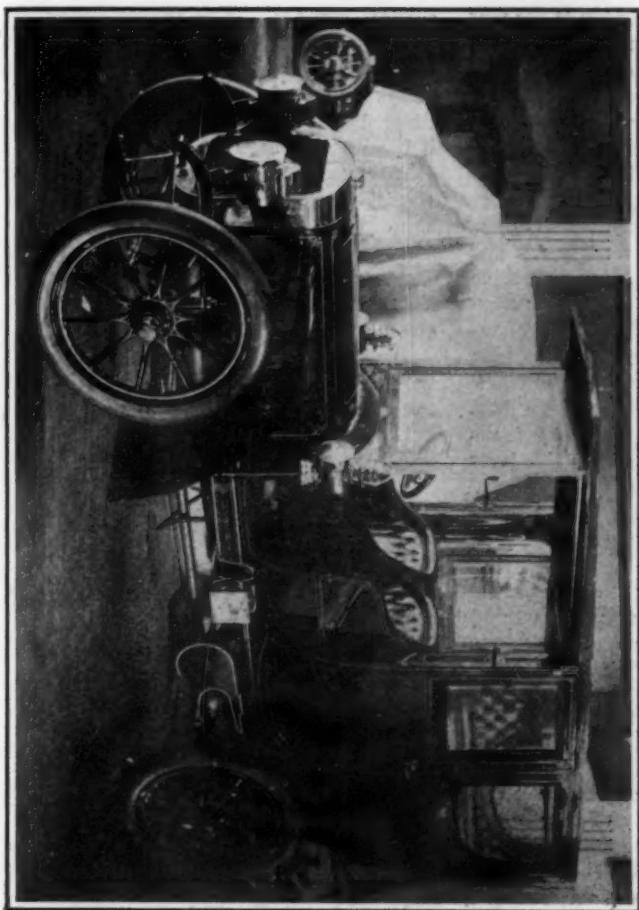
Other well-appointed carriages include rear driven stanhope, the Queen Victoria, driving from the passengers' seat; regular victoria, with seats for two grown persons and one child back of the box for coachman and footman; circular front inside driven brougham and open and closed landauettes.

#### STODDARD-DAYTON LIGHT CAR.

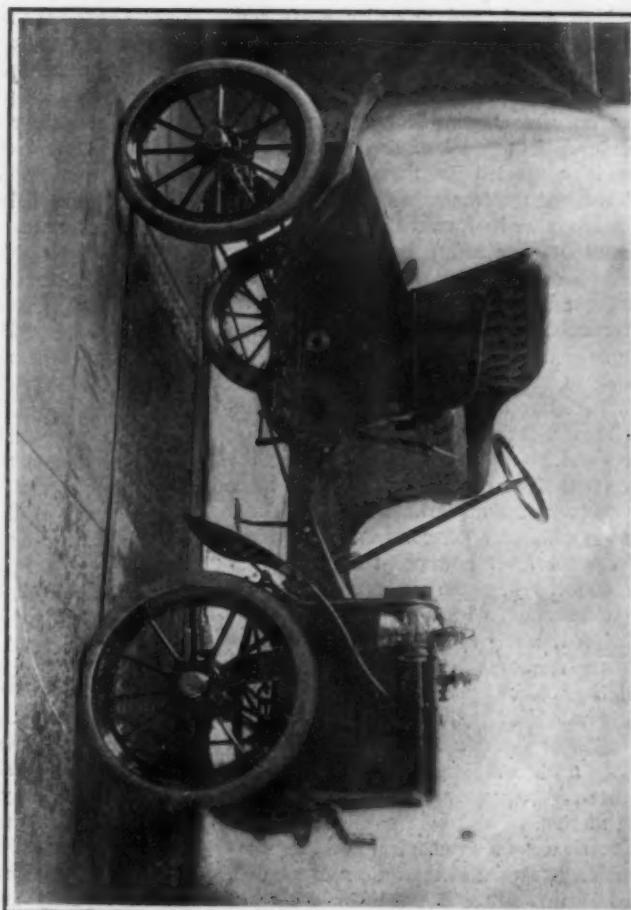
Another important show novelty was the exhibit of Stoddard-Dayton cars, made by the Dayton Motor Car Co., of Dayton, Ohio. This newcomer shows a type of light touring car that embodies the chief features of modern motor-in-front construction, and is made in one size only, a side-entrance car of 25 horsepower, weighing, complete, 1,800 pounds. The car is an extremely interesting one, and gives a striking illustration of how desirable results can be accomplished by the elimination of fads for their own sake in design, and the intelligence in construction which comes of long experience in construction.

The company is an offshoot of an old-established manufactory of agricultural implements, with extensive facilities in forge and machine shop, which embrace the important item of pressed steel frames. The car shows the result of a design which embraces chassis and body in a harmonious whole. It has the standard steel frame, semi-elliptic side spring suspension, long closed bonnet, with radiator in front, hollow dash and body, with swelled lines, and a general suggestion of rakishness and speed.

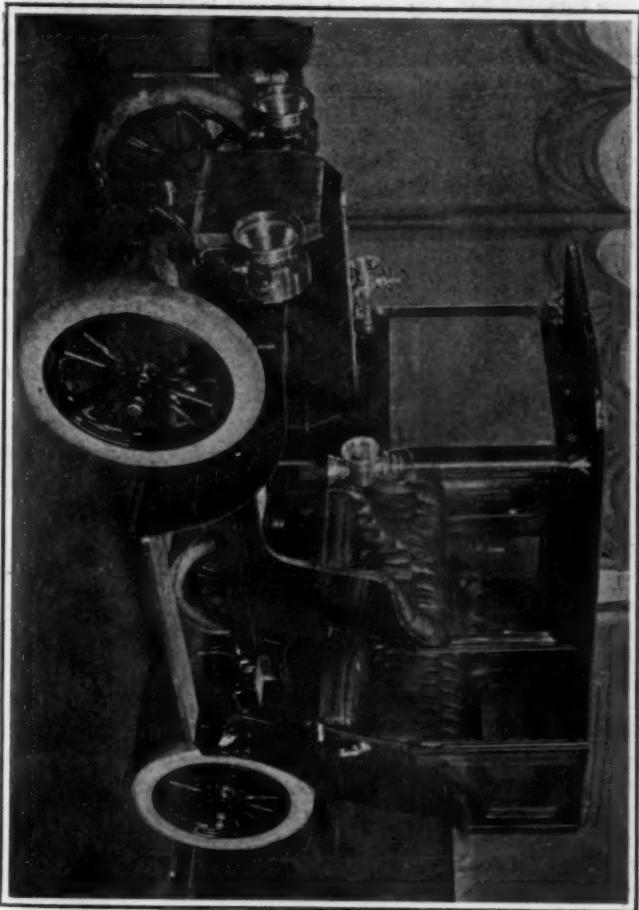
The motor is a regular four-cylinder Reutener engine, with cylinders measuring 4 by 4 inches, and developing 25 horsepower at 1,200 revolutions. The cylinders are cast separately, with valves on one side, mechanically actuated. Camshaft, 2 to 1 gear and gear for working the circulating pump and the timer are all enclosed. The radiator is a Briscoe, with flat tubes and square fins, the draft being assisted by a belt-driven four-bladed fan. The transmission system embraces a flywheel cone clutch, sliding gears with direct drive on



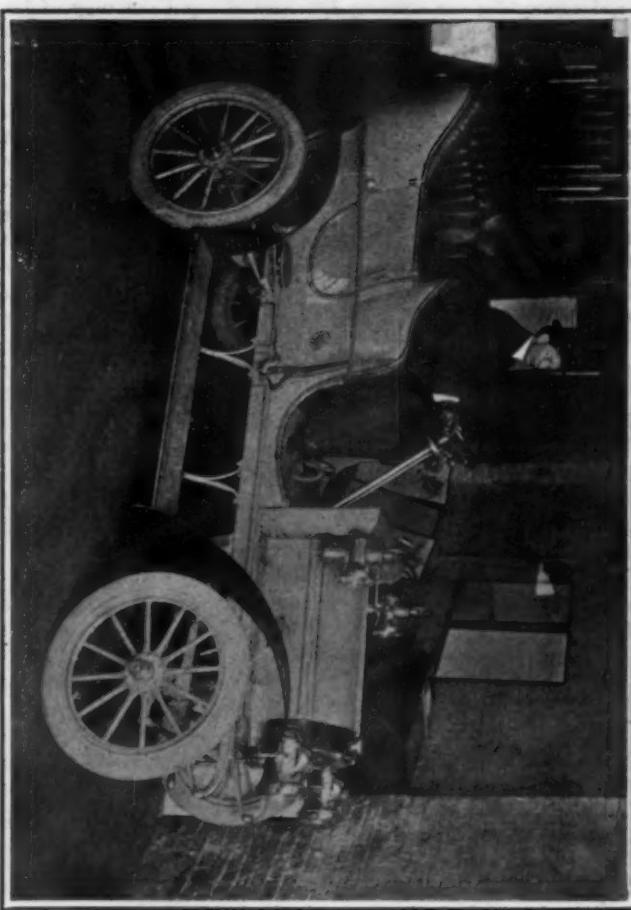
WOODS 40-H.P. GASOLINE CAR.—Can be Converted from Closed to Open Vehicle.



GALE RUNABOUT, WITH BODY, DASH AND HOOD HINGED AT REAR END.



STODDARD-DAYTON SIDE-ENTRANCE CAR, WITH FOUR-CYLINDER MOTOR IN FRONT.



WELCH SIDE-ENTRANCE OPERA 'BUS.—Note Seat on Inside of Door.

the high speed, and propeller shaft connection to the rear axle differential. There are gears for three speeds forward and reverse, with connections to the gear shifting lever on the steering column below the wheel. A foot pedal of the push-forward type is connected so that the clutch is released and the transmission brake applied successively by its forward movement. Additional braking effect is secured by the rear hub equalized brakes, operated by the side lever in the usual way.

Accessibility has been made a leading feature of design. One of the results is the closing of the gear case, which is covered by a flat plate held in place on a male and female felt-packed joint by four locking bolts, which are opened and closed by the movement of a handle on the cover, after the manner of a modern safe door. There is no multiplicity of connections between the control lever and pedal and the gear box and clutch, and such as are used are of good section, with large joints and pins and nuts securely locked.

In the frames, which are struck up cold, a high grade of open hearth steel is used, and a touch of individuality is shown in the ends, or spring hangers, which are separately made of Parsons bronze, polished so that they can be recognized when a car is in motion.

Experience in mechanical vehicle construction is shown in the axle construction. An I-beam section is used for the front axle, which is without weld, and the front tie rod connecting the steering knuckles is also without weld, of square stock originally swaged round with upset ends. The rear axle differential casing is divided longitudinally, the top half being removable without disturbing the gears.

Mechanical lubrication is fitted for the motor, and the ignition is by jump spark, with timer mounted on a vertical shaft, just in front of the dash, and driven from the crankshaft by spiral gears.

The side doors in the body are of good dimensions, and a good finish is given the woodwork and upholstery. The former is painted pearl gray and the latter is tan color. Minor details, such as the muffler and the tanks, seem to be of sound construction. Clincher tires, 3 1-2 inch by 32 inch, are fitted to ball bearing wheels. Wheel-base is 96 inches and tread standard, gasoline capacity, 14 gallons.

It is altogether a very attractive car, especially at the price asked, and if it holds up as well as it looks in the show booth, it will become popular.

#### THE GALE RUNABOUT.

One of the lowest priced small cars in the Show is the Gale, built by the Western Tool Works, at Galesburg, Ill. This is a runabout built on modern lines, with hood in front, wheel steer, double elliptic springs and a wheel-base of 72 inches.

The body and chassis are quite independent. All the mechanism is carried on an angle iron frame, including even the tank.

To this frame the body is hinged at the rear end, so that when two bolts in the foot-board are unscrewed the body tips up, exposing the entire power plant and running gear. The motor is horizontal, with a cylinder 5-inch bore and 6-inch stroke, of 8 horsepower, water cooled and piped to a radiator hung below the frame in front below the bonnet. Planetary transmission, oil encased, gives two forward speeds and reverse, and drive is by interior side chain to the rear axle differential. Full elliptic springs are used on both front and back axles. The former is tubular and the back axle is solid, a sleeve driving the wheel nearest the chain. The differential is a Brown-Lipe. Pedals give control of the service brake and reverse and the side lever the speed control. A foot throttle and spark advance on the seat are fitted. Wheels are of artillery type. The springs are 34 inches long, the wheels 28 inches, with 3-inch Hartford single-tube tires, the wheel-base is 72 inches and the weight, ready for the road, 1,000 pounds.

#### TINCHER SEMI-RACING CAR.

A very interesting contribution to the few novelties at the Show is the chassis of a semi-racer shown by Tincher. This builder's exhibit is always a feature of the Western show, consisting usually of one or two large touring cars, the only type of machine he has hitherto constructed. The works of limited capacity are situated in Chicago, and it is the intention to increase the output not only of large pleasure cars, but to build commercial vehicles. To that end a corporation styled the Tincher Motor Car Co. has been formed recently and the exhibit is in its name.

The chassis shown is fitted with a four-cylinder motor, 6 inches by 7 inches, which is rated as of 60-70 horsepower. Though of simple design it differs considerably from the type before made, as formerly all the cars were equipped with the Reutener engine. Each cylinder in the new motor is cast separately with separate head and copper water jacket. The valves are placed on each side, and over the tops of the inlet valves—which, by the way, are 3 inches in diameter—are composition screwed plugs each fitted with two spark plugs. Both plugs are used at one time, the terminals being so connected up that a fan-shaped stream of sparks is produced. Two coils are fitted, both in action for one cylinder at one time. Each cylinder is over what is practically a separate crankcase, semi-spherical in shape, and the crankcases are connected in pairs by short ducts. The copper jackets are not attached in the usual way but each is held in place at the bottom end by a turned steel ring shrunk over the joint between the spun copper jacket and the cylinder casting. There is no engine sub-frame, arms on the aluminum base reaching out to the main frame at the sides.

Angle steel is used for the main frame, reinforced with wood abreast of the engine and with forgings at the ends giving these

channel sections. It is trussed longitudinally. Both the change-speed gear and the differential of the cross countershaft are compactly housed, and are of the type adopted by Tincher in touring cars. Drive is by side chain.

In the semi-racer on exhibition there are several modifications of the regular touring car construction. Braking is on the rear wheels, set by foot pedal. The cone clutch is controlled by a pedal also, both of the push-forward type, and the side lever gives control of the change-speed gears. Spark and throttle levers are inside the steering wheel on a quadrant which does not revolve with the wheel.

The axles show care in design. They are of I-beam section. The outer ends of the front axle are male, not unlike the Mercedes type. A special modification in design on the principle of a hinge acts as a stop to the right and left angles to which the front wheels can be turned so that the tires cannot rub the frame.

Cooling is effected by Briscoe radiator with water pump and fan. The carburetor is automatic, of special design. For a car of this long wheel-base—125 inches—and power, the weight is low, 2,195 pounds ready for racing.

#### FEATURES OF THE NEW RICHMOND.

The Richmond, taking its name from a town in Indiana, is shown in an improved and more powerful type of air-cooled motor car by the Wayne Works. A two-cylinder car was the first type built by this concern, which now shows a side-entrance light touring car fitted with a four-cylinder vertical motor in front, of 20 horsepower. The cylinders are 3 3-4 by 4 inches, and are set tandem with the valves on one side, both removable by taking off the inlet valve cap. A compound frame of angle steel and wood carries the motor and running gear. The change-speed gear case is compact and contains first and second motion shafts with gears operated by expanding ring clutches and giving three speeds forward and reverse. The driver's speed control is by side lever, which can be moved through the gears from reverse to high-speed power without interruption or shock. Ignition is by jump spark taking current from a Remy magneto.

A little feature of manipulation which is intended to be fool-proof is a connection from a small lever under the steering wheel to a knife switch in the ignition circuit and the oil feeds in the mechanical lubricator. When the circuit is opened the oil supply is simultaneously cut off.

In addition to the small lever referred to there is a throttle lever under the wheel and a supplementary foot pedal below. Three other push forward pedals control respectively the working brake on the transmission, the rear wheel emergency brakes, and a muffler cut-out.

Some of the other particulars are, wheel-base 90 inches, tread 56 inches, tires 30 by 3½ inches, weight 1,600 pounds.



ADAMS-FARWELL CONVERTIBLE CAR AND ROTATING HORIZONTAL MOTOR.

Full elliptic springs support the body at front and rear. In general the outlines of the car are good. The bonnet in shape is an inverted U. There is a long running board on each side, and the side entrances to the body are of good dimensions.

#### UNIQUE ADAMS-FARWELL CAR

Those who seek novelties will find them at the stand of the Adams Co., of Dubuque, Ia., builders of the Adams-Farwell car, for not only is this the show debut of the car, but the construction in chassis and body is radical in the extreme. Readers of THE AUTOMOBILE will recall an extensive description of the car published in the issue of October 29, 1904. A complete vehicle is shown and an engine connected to an electric motor so the rotation of the cylinders can be observed.

An "all-season car" the builders style the complete vehicle shown, which in appearance is not unlike an inside driven electric brougham. That is, when it is closed, for when the folding front seat is let down it is unlike any other body on the market. For winter use the car is closed and the steering and change speed horizontal levers are inside. In fine weather when the front seat is used these levers, together with the steering pillar, can be removed from the interior and set up in front of the outside seat. All the window sashes can also be let down into the body and practically an open vehicle is the result.

The motor of the car, as will be recalled, is a three-cylinder horizontal, with the cylinders disposed radially around the vertical single crankshaft and at equal angles. The cylinders are ribbed and cooled by the air-currents set up by their rotation in the engine casing, which is set below the body a short distance ahead of the rear axle. A rearward extension of the lower part of the body is provided with a sloping lid which,

lifted up, discloses the dry battery box and a tool chest.

The transmission is a combination of the planetary and sliding gear types giving four speeds forward and two reverse, and the drive to the rear axle is by single chain.

There are a host of minor features and talking points about this car. One feature rather out of the ordinary is the method of attaching the gasoline tank. This is held underneath the car body by two stout leather straps with buckles, and when in place is piped up in the usual way. It is pointed out by the builders that frequently the owner of a car desires to put up at a

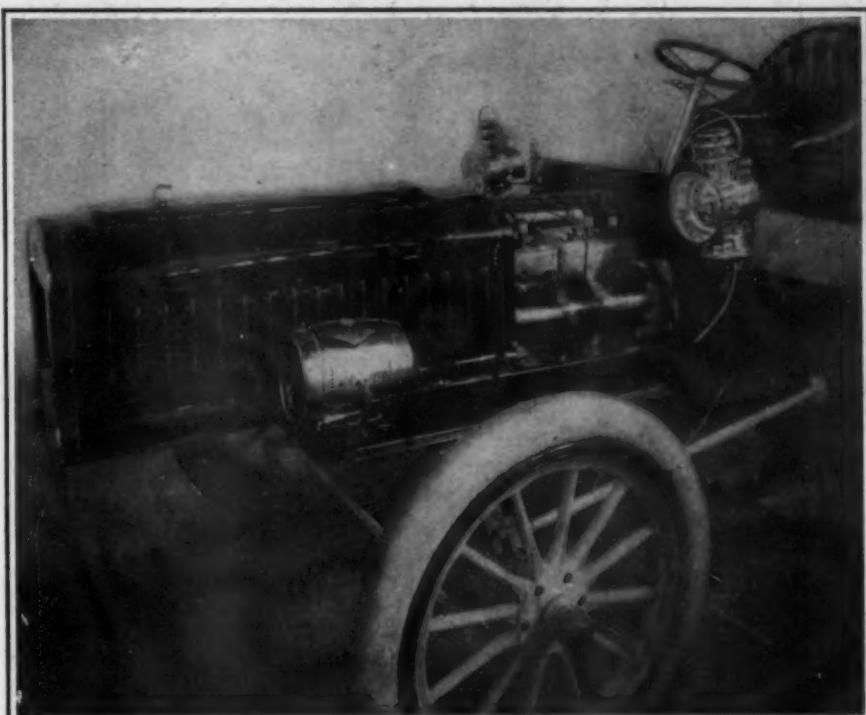
hotel or stable, but is barred out because of the gasoline carried in the tank. In such emergencies, therefore, the owner of this machine can unstrap the tank, disconnect the feed pipes and leave the gasoline in its own vessel outside the building in which the car is stored.

In a catalogue distributed at the show other types of bodies along more conventional lines are shown.

#### MOLINE RUNABOUT AND TOURING CAR.

Formerly builders of gasoline engines exclusively, the Moline Automobile Co., of Moline, Ill., is now building automobiles and shows two cars, both with side-entrance and open bodies. One of these is styled a touring runabout, and the other a regular touring car. In both the exterior lines follow the model of motor-in-front cars, though in the smaller car the motor is a double-opposed, with cylinders 4 1-2 by 4 1-2 inches, rated at 18 horsepower. A detachable tonneau is fitted. The spring suspension is a transverse spring in front and a full elliptic in the rear. Planetary transmission with all spur gears is used. The car is neatly finished and the mechanism is apparently of substantial construction, the combination making quite a modern and pleasing looking car.

In the larger car the motor in front is a vertical four-cylinder 4 1-2 by 4 1-2 inches, rated at 18 horsepower, with planetary transmission and shaft drive, giving two speeds forward and reverse. The control system and other details are of modern design. A feature is the sliding hood which, instead of opening up, moves forward in grooves at its base. The body has good lines, a well-curved back to the rear seat



SLIDING HOOD OF MOLINE 18-HORSEPOWER TOURING CAR, PARTIALLY REMOVED.

and side doors of ample width, on a wheel-base of 105 inches. Both the cars are finished in a workmanlike way and are listed at moderate prices.

#### AUBURN DOUBLE-CYLINDER CAR.

Another of the Western concerns that has developed an automobile branch from an old established carriage business is the Auburn Automobile Co., of Auburn, Ind., which has been making progress slowly in the sense of confining its operation to the construction of a limited number of cars. Last year it showed a single-cylinder 12-horsepower touring car of the horizontal motor type, with tonneau body. This year

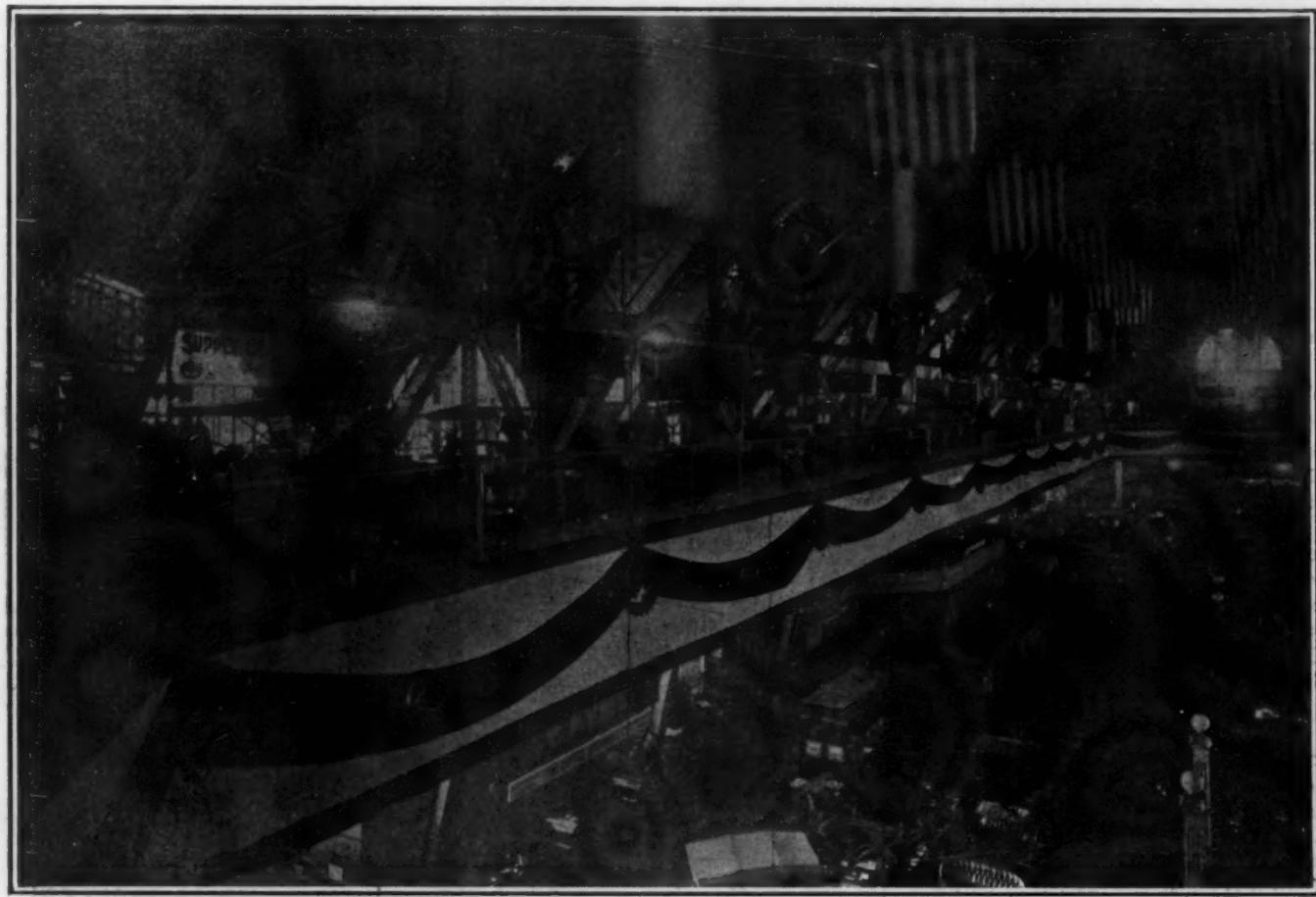
springs are fitted at the back and single elliptic in front. Wheel sizes are 30 inches by 3 1/2 inches, and the wheel-base 92 inches.

All the driving mechanism is supported on an angle steel frame, and the various means of control follow well established lines in this type of car. The weight complete is 1,750 pounds.

Experience in carriage building is shown in the body construction. It is roomy, and though plain, for the car sells at a moderate price, is well finished. Below the rear seat there is a spacious box, the size of which is increased by a rearward extension of the body below the seat-back. The car has al-

#### HOLSMAN HORSELESS BUGGY.

A first appearance at a Chicago show is made by the Holsman automobile, which, however, is by no means a novelty. It is an automobile in everything but appearance, which in motion resembles nothing so much as an animated buggy. Perched up on four 48-inch solid-tired buggy wheels is the body—a regular piano-box with top. This is suspended on long spring reaches which carry a frame made of tubes and angles, to which the motor is attached beneath the body. The prime mover is a 10-horsepower double-opposed air-cooled motor, the crankshaft of which carries twin chain sprockets of equal diameter, which



WEST GALLERY, OVER MAIN ENTRANCE, FILLED WITH EXHIBITS OF PARTS AND SUNDRIES.

the car shown, though in general built on similar lines, has an 18-horsepower double opposed motor and a side-entrance body.

At first glance the machine has the characteristic appearance of a regular motor-in-front touring car, as a deep hood with side ventilators is fitted with tubular fin radiators in front in the opening. This bonnet, however, covers the tanks; the gasoline tank having a capacity of 12 gallons and the water tank 8 gallons. The motor is located under the body, easily accessible by raising the baseboard, and is connected direct to the planetary gears, which give two speeds forward and reverse. The drive is by center chain to the rear axle, which is fitted with roller bearings. Two full elliptic

ready been sold and bears the name *Evangeline* painted on the back of the body; a special request of the purchaser, who wishes to invest the car with a personality such as is possessed by a motor boat for example—a very pretty idea.

This year the manufacturers expect to increase their output to 300 cars. The car is a good example of a type that is being developed in the West, and from letters from users on inspection at the show, it is one that finds an increasing circle of satisfied users.

Another car of the same general type, but with a large wheel-base and "carry all" body, is also being built for summer resort and depot work.

may be separately driven by suitable movement of the change-speed lever. These sprockets are connected by their chains to sprockets of unequal diameter on a cross countershaft suspended below on the outer ends of which are V-grooved driving pulleys. These pulleys are belted by 7-8-inch manila rope to large U-shaped sheaves of smaller diameter than the rear driving wheels, held on the spokes by clamps.

To vary the speed of the car within the effective range of power transmission of the first motion chain gears, the belt driving pulleys are hinged so that the movement of a control lever slackens the tension on the driving ropes and slipping occurs. A continued forward movement of this con-

trol lever sets the brakes, the shoes of which engage in the U sections of the rope-driven pulleys, and a still further progressive lever movement brings small metal sheaves on the ends of the countershaft into contact with the rear rubber tires.

The vehicle is certainly a curious survival in which the builders have great confidence for future growth. They point to the successful use of the vehicle by doctors and others, and guarantee a speed capacity up to thirty miles an hour on ordinary roads with two persons up. Its weight complete is 750 pounds, giving a high ratio of power to weight, and the selling price is low. This horseless carriage will be recalled by

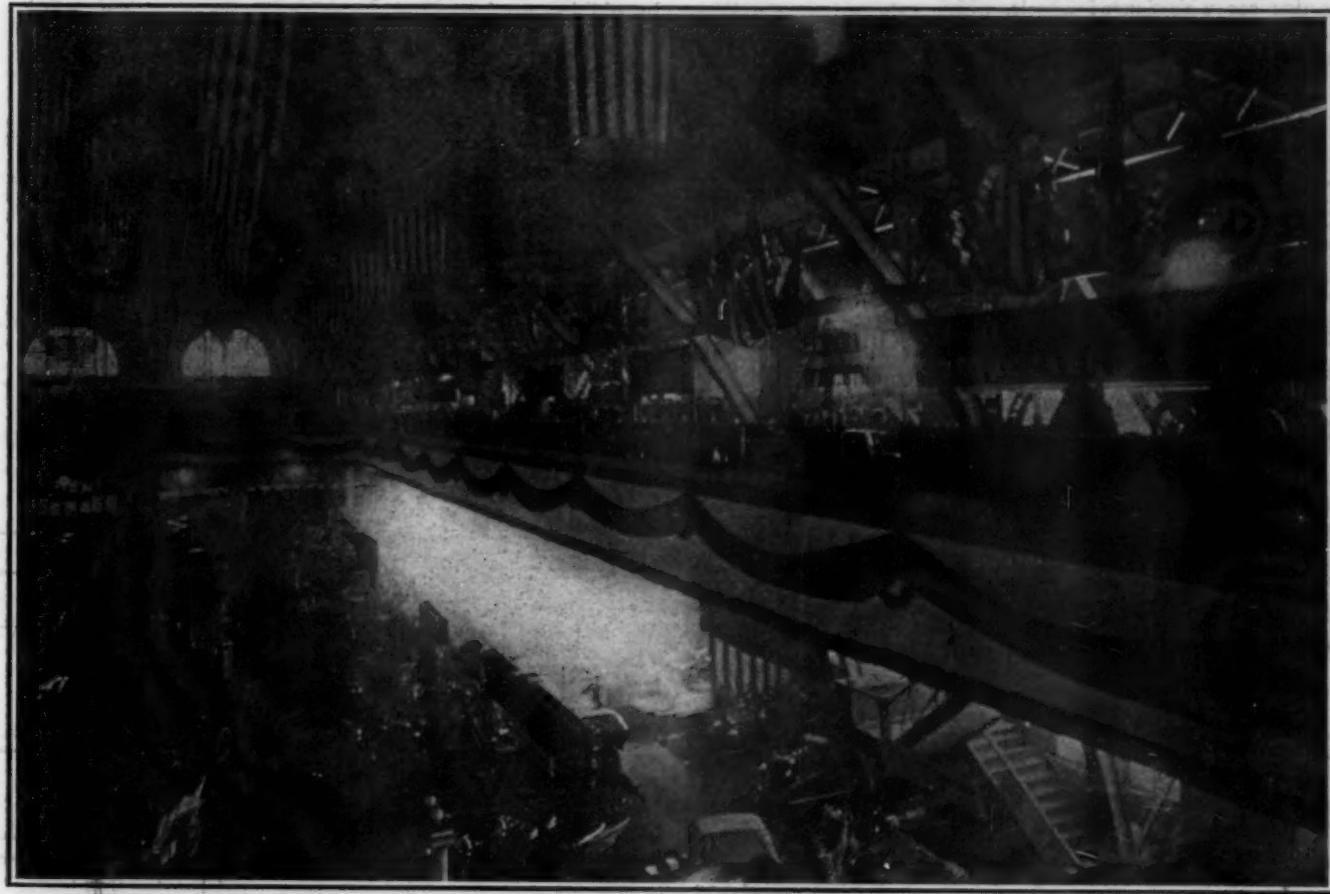
clumsy effect. Some really fine examples of bent wood construction are shown in the corners, and throughout are a solidity and yet lightness that even the novice can recognize.

It was an excellent idea to take the purchaser into the confidence of the constructor, for as yet the building of automobile bodies is an art not well understood by the individual purchaser, or by many builders of complete vehicles, for that matter. This concern takes the ground that engineering construction as embodied in the chassis has little or nothing in common with the art of body building, and that the problem of the perfect complete vehicle

The familiar type of twelve-passenger brake with canopy top is exhibited by the Chicago Motor Vehicle Co. A 25-horsepower double-opposed horizontal motor is used and the transmission system includes a friction drive. Solid tires are fitted and the body carried on heavy double elliptic springs in front and platform springs in the rear. The weight is given as 2,800 pounds.

#### THREE MIDDLE WESTERN MAKERS.

A side-entrance car, a runabout, and a chassis showing the working parts of the Glide car are exhibited by the Bartholomew Co., of Peoria. The tonneau has an engine



EAST GALLERY OF THE COLISEUM, LOOKING NORTH, AND PORTION OF MAIN FLOOR.

those who participated in or witnessed the now historic 1902 Reliability Run in Chicago.

#### KIMBALL SIDE-ENTRANCE BODY.

An example of body work that arrests the attention of the expert and those who appreciate beauty of line and form is on view at the stand of C. P. Kimball & Co., the Chicago coach builders. This is an unfinished-side-entrance body with enclosed back, canopy top and glass wind-shield in front of the driver's seat, on a 1905 model Mercedes chassis. The long wheel-base has given the designer scope to provide an abundance of room longitudinally, and this has been deftly carried out in a transverse direction without in the least getting a

can be solved only by the coöperation of the skilled in each art. This is certainly the view that prevails in France, even when the combined cost is not high.

There is also a growing disposition on the part of owners of expensive cars to have embodied in the construction some of their personal preferences and tastes, as in yacht or high-grade carriage construction. To this growing class the expert carriage builder is therefore turning, as is here shown.

A feature of this particular exhibit that seems to interest the crowd that doesn't know or doesn't care much about bodies is that it is the most costly single exhibit in the show.

of 12-14 horsepower, and the smaller car a single-cylinder engine of 8 horsepower.

One side-entrance car of the horizontal double opposed cylinder type is exhibited by the Reliance Motor Car Co., of Detroit. The car has a capacity for five passengers and is built on graceful lines.

At the end of the aisle facing the entrance to the building, the electric sign of the Ford Motor Co. cannot fail to attract attention. The Ford display occupies a general space along the east wall, and includes a chassis of the new four-cylinder car, a side-entrance touring car with canopy top, a side-entrance touring runabout, a regular tonneau, a runabout, and a light delivery wagon.

## Prominent Exhibits of Well-Known Makers.

At the New York show the products of the Olds Motor Works were crowded in a comparatively small space, but at Chicago the Olds exhibit occupies a large and conspicuous place. The company has added to the attractiveness of the display by surrounding the space with the white pedestals and brass standards that were a feature of the automobile section of the St. Louis Exposition. The vehicles shown are the little runabout, the touring runabout, the touring car and the new double-cylinder touring car. The Olds delivery wagon is also exhibited, together with the railroad inspection car with flanged wheels, which has been illustrated and described in these columns. The new Olds omnibus is used outside the building for demonstrating purposes. Roy Chapin, the sales manager of the company, assisted by Advertising Manager Buck, is in attendance, and is kept busy answering the many questions of pres-

horsepower horizontal opposed cylinder engine and planetary transmission which have been described in these columns.

### MAXWELL DEBUT IN THE WEST.

The first appearance in the West of the Maxwell car exhibited by the Maxwell-Briscoe Motor Company is drawing the interested attention of the visitors. The success of the two models—8-horsepower runabout and 16-horsepower touring car—at the New York show promises to be duplicated, and Benjamin Briscoe, who is here for the concern, is appointing agents throughout the West. In addition to the two models, a chassis is shown in which the simplicity of the power plant is illustrated.

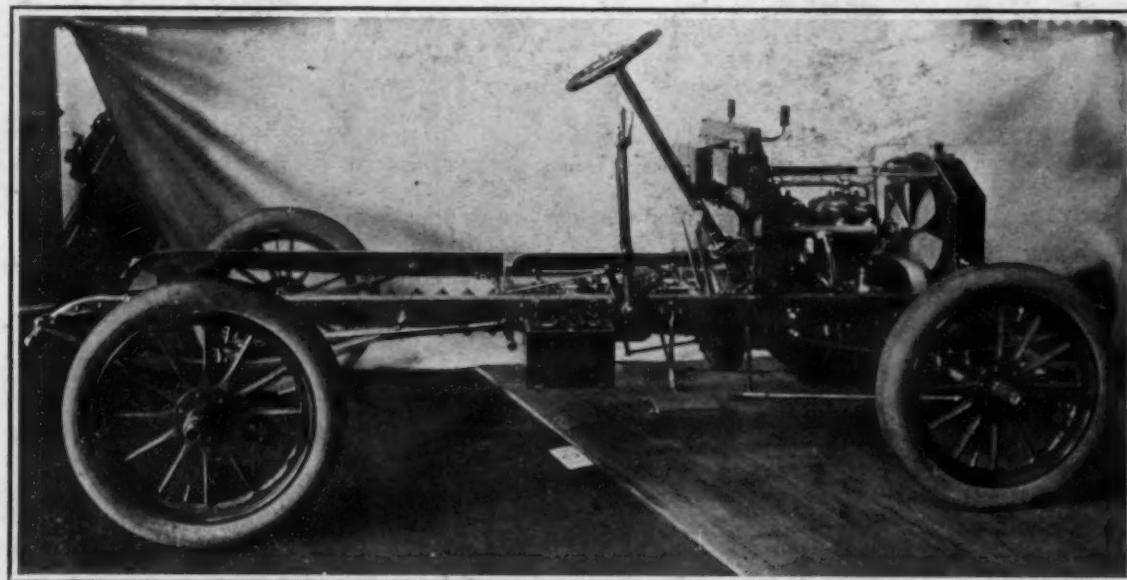
### CHASSIS OF THE NEW CLEVELAND.

A chassis showing the entire mechanism of the company's product is shown by the

white 45-horsepower touring car with beautiful green leather upholstery attracting most attention. A 30-horsepower Pope-Toledo with limousine top is another prominent feature, while the Pope-Hartford and the new model of the Pope-Tribune are centers of interest. It appears that almost every requirement is filled by the line of vehicles displayed by the several factories. The mechanical features of the cars have already been described at length in these columns.

### HANDSOME COLUMBIA TOURING CAR.

Occupying a raised platform in the center of the large space reserved by the Electric Vehicle Co. is the beautiful chocolate-colored 35-40-horsepower touring car which was one of the attractions of the New York show. The car is upholstered in brown cloth with a cloth-lined leather top. The lines of the vehicle are graceful in the extreme, forcibly though silently testifying the advanced stage that the carriage builders' art has reached in this country. The exhibit includes two chassis, one with the



CHASSIS OF THE NEW CLEVELAND 18-20 H. P. CAR, WITH FOUR CYLINDER VERTICAL MOTOR IN FRONT.

ent Oldsmobile owners to whom the new touring car is especially attractive.

### POPULAR WINTON EXHIBITS.

In the center of the exhibit of the Winton Motor Carriage Co. is a 16-20 horsepower motor with one of the cylinders cut away to show the action of the pistons and valves of the new vertical engine, an exhibit that is proving interesting to the many visitors. Among the cars exhibited by this pioneer house is a limousine, one of the aluminum finished model C, and a 40-50 horsepower car of powerful and substantial appearance. Charles Shanks, general sales manager for the company, is kept busy booking orders for the new models.

Two models are exhibited by the C. H. Blomstrom Motor Co., one with side entrance and long wheel-base, and the other a rear-entrance tonneau. Both have the 16-

Cleveland Motor Car Co., together with a side-entrance touring car of 18-20 horsepower. The vehicle is built on graceful and substantial lines.

The cylindrical cellular radiator of the National car shown by the National Motor Vehicle Co. is distinctive and draws attention to the exhibit. The cars shown are a side-entrance touring car, a chassis of the same car, a doctor's electric phaeton, and an electric runabout.

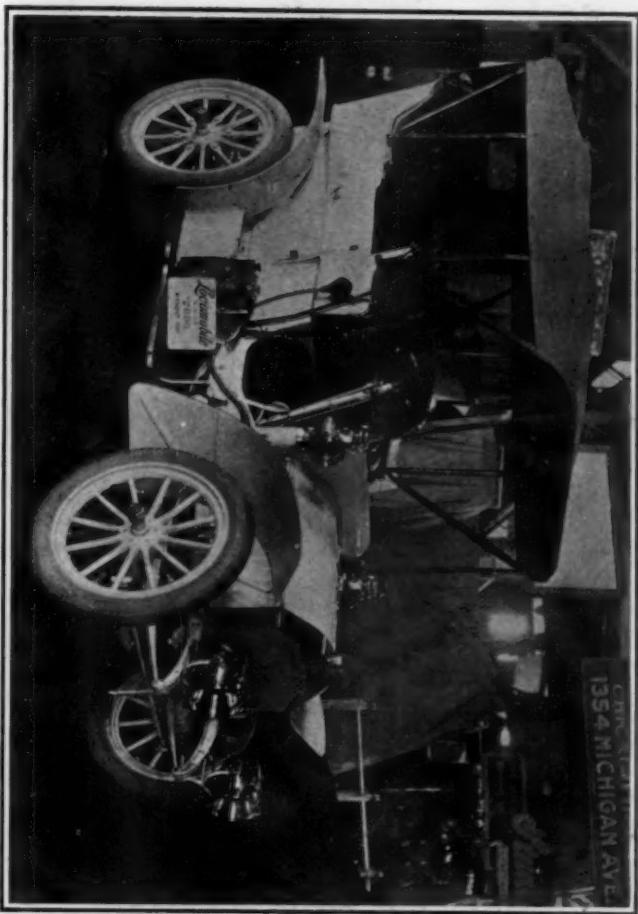
### EXTENSIVE POPE DISPLAY.

Eight spaces are used to display the products of the Pope Mfg. Co., and the Pope Motor Car Co., constituting the most extensive exhibit of the entire show. There are electric delivery wagons, runabouts, stanhopes and broughams in the Waverley line, while the well-known Pope-Toledo is the feature of the gasoline car display, a

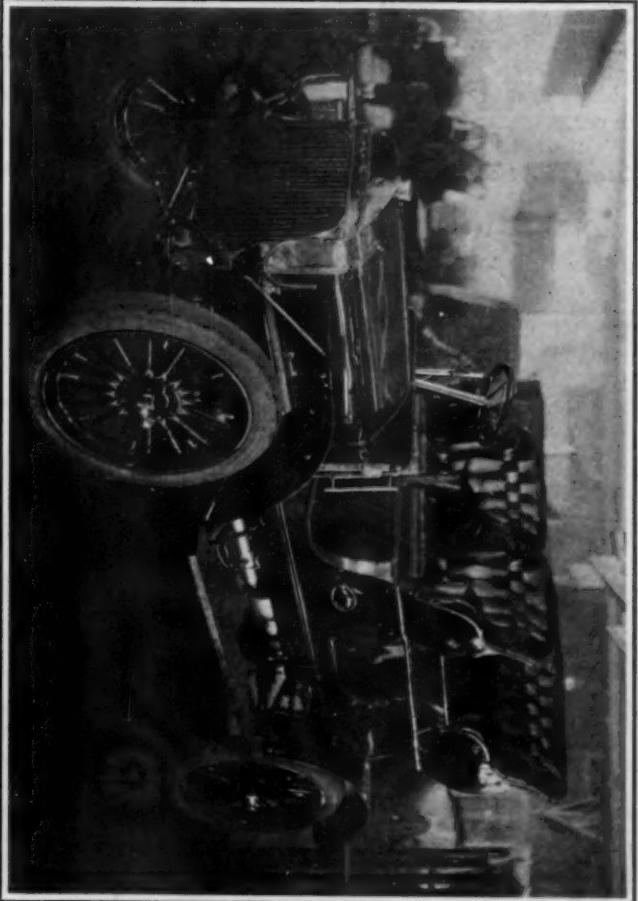
engine cut away to show the working of the valves. A section of a crankshaft is also shown which illustrates the lubricating system for the crank pins. President M. D. Budlong and Vice-President Armstrong arrived on Monday.

### HAYNES-APPERSON ROLLER DRIVE.

A chassis with the engine run by an electric motor draws many visitors to the exhibit of the Haynes-Apperson Co. Elwood Haynes, who is one of the pioneers in the industry, has just given the Haynes automobile which was one of the first practical horseless vehicles produced in this country, and which was a feature of the firm's exhibit at several previous shows, to the National Museum at Washington. The innovation presented by the firm at the New York show is having the central drive shaft pinion fitted with hardened steel rollers in-



NEW LOOCOMOILE 15-20 HORSEPOWER, SIDE-ENTRANCE TOURING CAR WITH CAPE HOOD.



HAYNES-APPERSON NEW SIDE-ENTRANCE OPEN CAR WITH TULIP-SHAPED BODY.



MAXWELL CARS AND CHASSIS MAKING THEIR WESTERN DEBUT.

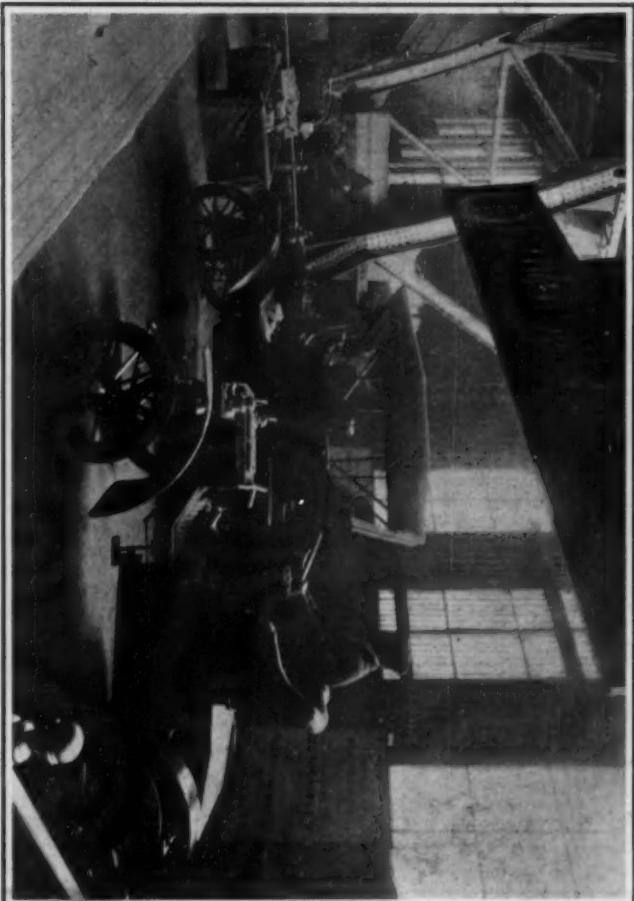


EXHIBIT OF REO RUNABOUT AND TOURING CAR WITH CAPE HOOD.

stead of the usual bevel gear, is one of the new features in construction which is creating more than usual discussion.

#### FEATURES OF PACKARD DISPLAY.

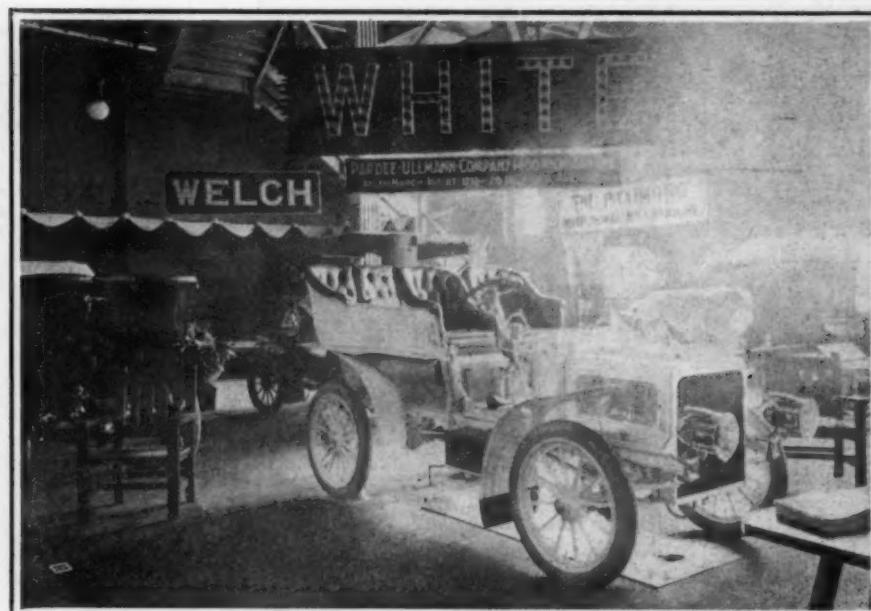
The *chassis de luxe*, as the product of the Packard Motor Car Co. was named at the New York show, is given the center of the firm's exhibit. It is shown surrounded with brass railings and chains, and every detail, from the exquisite finish of the cylinders to the glass dash, with its polished attachments, is minutely examined by the visitors. Besides the regular touring car, the firm is showing a doctor's phaeton—a vehicle seating two with a brougham-like body—and the Packard Special, a single-seat car. A board mounted with the forgings used on the Packard car is also shown. The Pardee-Ullman Co., the Chicago agents, are in attendance and Messrs. Waldon and Densmore are expected from the factory.

#### RUN BY COMPRESSED AIR.

While of course no engine is allowed to be run under its own power, the White Sewing Machine Co. accomplishes the same purpose by having one of its regular cars mounted on jacks and run by compressed air. The air is supplied from the basement of the building, and is fed to the cylinders of the engine like steam. Under the car is a large mirror, and visitors are thus enabled to see the actual working of the parts which are usually hidden from sight. The cars shown include one in red with Cape top, a dark blue car, and one with canopy top and glass front.

#### PIERCE CARS IN MANY FORMS.

The exhibit of the George N. Pierce Co. includes a doctor's phaeton, an opera 'bus, a side-entrance touring car with leather top, a handsome landauet, and a touring car with canopy top. The display is interesting outside of the mechanical features, which have been described, because of the variety



WHITE CAR WITH REAR WHEELS RAISED AND ENGINE RUN BY COMPRESSED AIR.

of bodies, every requirement being provided for. The regular Pierce stanhope is also shown. The exhibit occupies a big space on the south side of the building and is one of the features of the show.

#### PROMINENT STEVENS-DURYEA FEATURE.

The new car of the J. Stevens Arms & Tool Co., with its four-cylinder vertical motor has the crankcase, clutch case and gear case in practically one unit, which is suspended from three points on the frame, and this feature excites attention. The fine workmanship and high finish which are shown on the regular models are characteristic of the Chicopee Falls factory. Sales Manager Hildebrandt has charge of the exhibit.

#### PROMINENT ANNEX DISPLAY.

The exhibit of Acme cars is shown in the

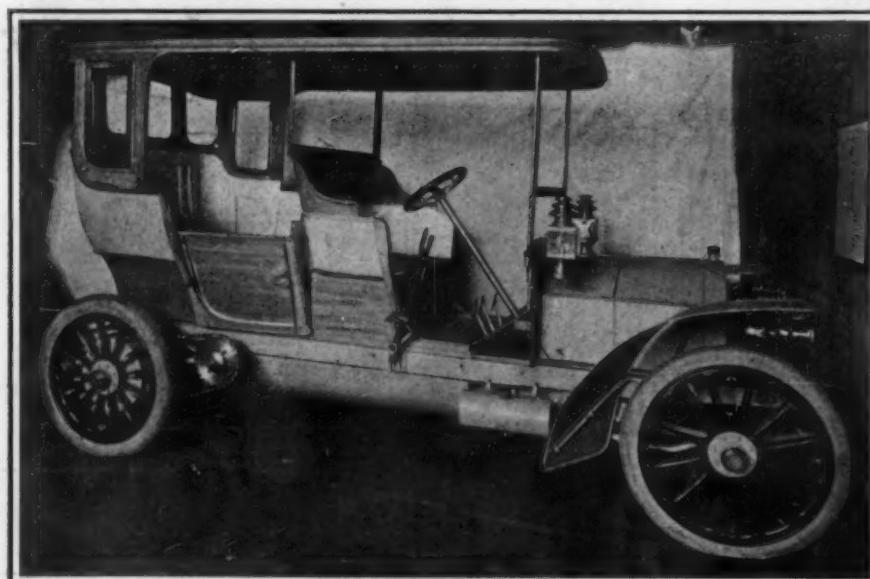
Annex by A. A. Devlin, the local agent. It includes the two-cylinder runabout which met with such favor in New York, a two-cylinder limousine, a four-cylinder touring car and an opera 'bus. General Manager T. D. Lingle is here to appoint new agents. Sales Manager Moscovics, who arrived here Friday, was taken ill and had to return to his home in New York. The exhibit of the company is shown in attractive manner, palms and brilliant electric signs making the space one of the most conspicuous in the Annex.

#### TWO-CYCLE ELMORE EXPLAINED.

Lack of adequate space prevented the Elmore Manufacturing Co. from showing at New York the chassis that is a conspicuous feature of its display here. The simplicity and effectiveness of the two-cycle engine which has been so consistently advocated by the Elmore people are explained by James Becker with practical illustration on the chassis. The car is attracting considerable attention, owing to the publicity won by the performance of the *Pathfinder* on the run to St. Louis last summer. Two of the new touring cars are also shown, one with a Cape top with curved bows, giving more room and comfort for passengers than is usual with this type of top.

#### MANY AUTOCARS BOUGHT EARLY.

Mounted on blocks elevating it above the floor for comfortable examination, the highly-finished chassis in the center of the Autocar Company's space is constantly surrounded by an interested crowd of enthusiasts. This chassis, with the new four-cylinder engine, a runabout and a touring car, are shown under an attractive electric sign which, after the show, will illuminate the establishment on Wabash avenue of Gayler & Levy, the agents for the car in this territory. The firm has practically ap-



INTERESTING KIMBALL BODY IN THE ROUGH, MOUNTED ON 1905 MERCEDES CHASSIS.



HOW THOMAS SALES WERE ANNOUNCED.

pointed all its agents for the season. That the many visitors to the exhibit are interested is evidenced by the numerous purchases made during the early days of the show.

#### RAMBLER LIMOUSINE ATTRACTS VISITORS.

Surrounded by tall fluted columns, topped with electric lights, the exhibit of Thos. B. Jeffery & Co. is conspicuous. Five Rambler cars, the complete line manufactured by the company, are shown. The 20-horsepower limousine attracts considerable attention, the Chicago weather making this vehicle particularly interesting for this time of the year. Several demonstrating cars are in constant use outside the building.

A convertible limousine and a chassis constitute the exhibit of the Welch Motor Car Co., the former having accommodations for five passengers in the rear. The car has an engine of 40 horsepower, and among those interested in cars of high power it is receiving considerable attention.

#### KNOX CHASSIS AND MODELS.

The Knox Automobile Co. is situated just to the right of the entrance to the

building, where it shows a chassis, a side-entrance tonneau, a surrey, a doctor's phaeton and a light delivery wagon, the last-named having been sold to a local express company, which has ordered the third of its kind. George A. Crane, the local agent for the company, has charge of the exhibit.

#### THE APPERSON SPECIAL.

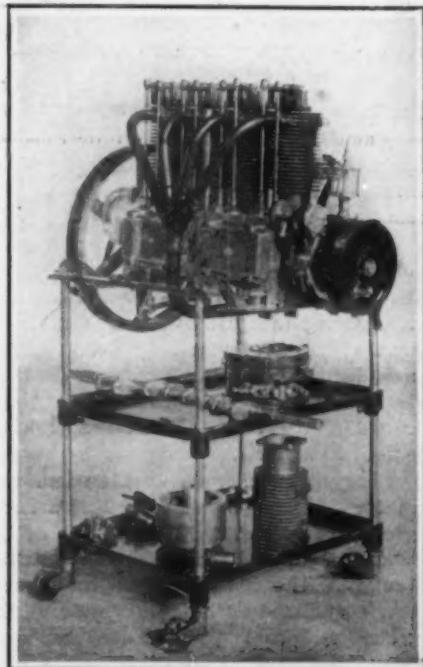
One of the first objects to strike the eye of the visitor on entering the building is the Apperson Special, in the exhibit of Apperson Bros. This is a single seated car finished in bright yellow, striped with green and black. The exhibit also contains the highly finished chassis that attracted so much attention at the New York show, and which is repeating its success at the Coliseum. A side-entrance touring car with Cape top is also shown.

A Pullman car truck sold to a local company is exhibited by the Vehicle Equipment Co., of New York.

#### COLDWELL GASOLINE LAWN MOWER.

The gasoline engine-driven lawn mower manufactured by the Coldwell Lawn Mower Co., of Newburgh, N. Y., aside from being the only implement of its kind in the building, is interesting to owners of gasoline motor cars in its simplicity and practicability for the purpose intended. Several prominent westerners have placed orders for the machine, and a number of automobile dealers are negotiating for the handling of the machine in their respective territories.

Located directly opposite one of the entrances to the Annex, the car displayed by F. B. Stearns & Co. is conspicuous outside of the fact that the new model is

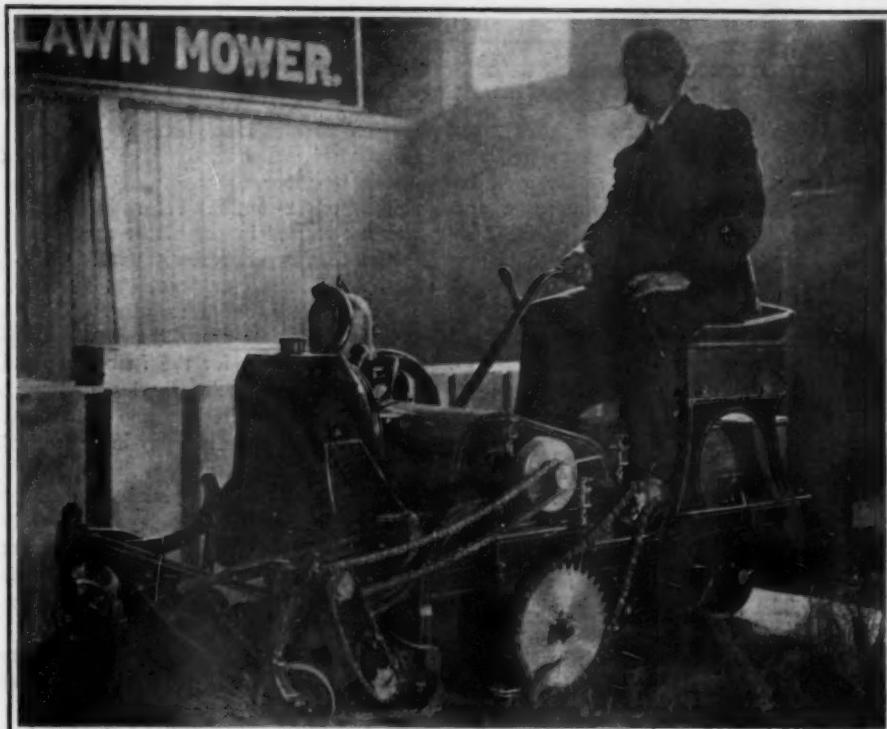


STAND FOR FRANKLIN MOTOR AND PARTS.

shown in the West for the first time. The new four-cylinder vertical motor with its exclusive features which were first seen at the New York Show is receiving considerable notice, and since the show opened several new agencies have been arranged for by the firm.

#### SOME AIR-COOLED MODELS.

That the air-cooled engine is popular in the West is attested by the attention which the exhibit of the H. H. Franklin Mfg. Co. receives. One of the company's regular four-cylinder motors is mounted on a stand



COLDWELL AUTOMOBILE LAWN MOWER, RUN WITH SINGLE-CYLINDER GASOLINE MOTOR.

to show its simplicity. The cars shown include a light robin's egg blue runabout, a red side-entrance car with Cape top, one of the new 20-horsepower touring cars, and a 20-horsepower limousine with detachable top and side windows. The little runabout in which L. L. Whitman made his record-breaking transcontinental trip is also shown.

A side-entrance touring car, a regular tonneau, and a runabout, all having the air-cooled engine that has proved so effective during the past season, are exhibited by the Premier Motor Mfg. Co. The Illinois distributors for these cars are the Bennett-Bird Co., and agencies have been closed at the Show for all the principal cities of the West.

Occupying the center of the south side of the Coliseum building, against a background of soft green, the products of the Waltham Mfg. Co. are shown to good advantage. The full line of air-cooled cars which attracted so much attention at the Madison Square Garden are displayed.

## Palm Beach Power Boat Tournament.

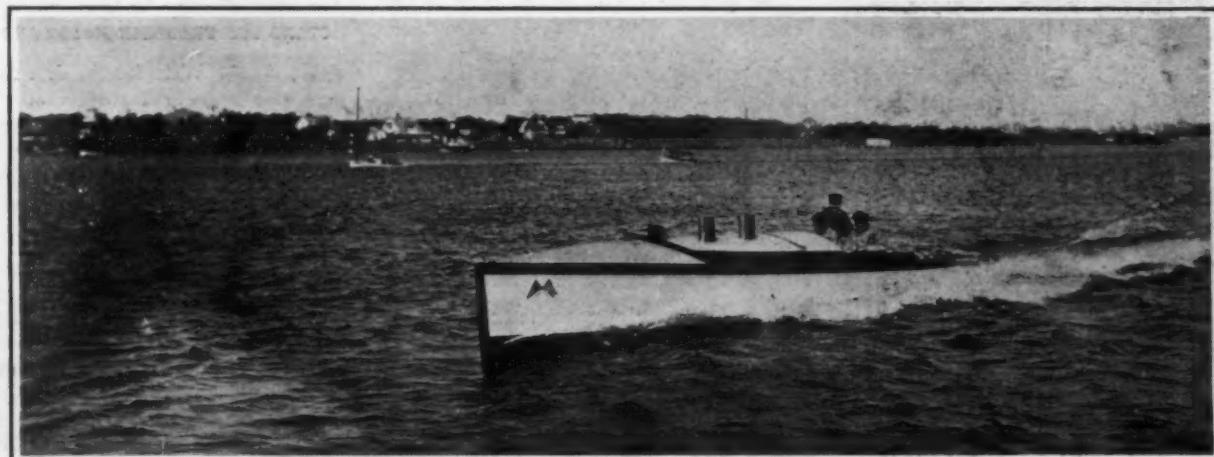
### Special Correspondence.

**P**ALM BEACH, FLA., Feb. 4.—With Sir Thomas Dewar and the Duke of Manchester as referees and with the most fashionable crowd of spectators that ever gathered at this famous winter resort, the first annual motor boat tournament at Palm Beach on February 1, 2 and 3 proved conclusively that the resort is an ideal one for the sport and that Lake Worth is well suited for high-powered craft. Three days of racing, extraordinary time by W. Gould Brokaw's *Challenger*, a gorgeous illuminated parade at night, and a parade of decorated boats in the afternoon; together with excellent management by W. J. Morgan and Fred Sterry, all contributed to a very successful affair.

Considering the fact that it was the initial attempt to promote power boat racing on an enlarged scale so far from the large centers of population, there was a good en-

deep, and although it was thought this was not deep enough for fast time by the boat driven by a 150-horsepower S. & M. simplex motor, it proved otherwise. Mr. Smith said, however, that he had been unable to turn on all the power. Next year there may be a three-days' affair at Palm Beach and probably another tournament in Biscayne Bay at Miami.

More visitors than have ever been present at this time of the year were on hand for the tournament, including society folk from all parts of the world. The races were run both morning and afternoon, with two hours' intermission for luncheon. There were scores of gayly decorated houseboats on the lake, besides the racing craft. Colonel Thompson's houseboat the *Everglades* was the official headquarters, with Leland Sterry on hand to assist in caring for the officials who lunched each day with Colonel



"CHALLENGER," OWNED BY W. GOULD BROKAW, UNDER SPEED IN LAKE WORTH—STAR OF THE PALM BEACH TOURNAMENT.  
Her Palm Beach Mile Record of 2:04 1-5 was Lowered to 2:02 in Biscayne Bay, at Miami, on February 7.

There is the little buckboard, the surrey buckboard, the tonneau runabout, and two models of the new four-cylinder air-cooled type, one with side-entrance tonneau and the other with a swinging front seat tonneau.

The automobile accosted the horse. "Get off the pavement," it said. "I am going to supplant you entirely."

"Neigh, neigh!" responded the steed, with a horse laugh. "They can't make canned corned beef of you."

Yet experience tells us that some beef has an inner tube consistency, for all that. —*Washington Life*.

Two cows and a horse were exchanged by Joseph Tuebel, of Hayton, for an automobile. The auto is second hand, but the live stock has been used some, too, so Mr. Tuebel is not dissatisfied with his bargain. The auto is the only one in Hayton. An inheritance from Germany has provided Mr. Tuebel with a good income.—*Green Bay (Wis.) Advocate*.

try list, although only one very fast boat, *Challenger*, was at hand. The *X P D N C*, owned by the late Frank Croker, had been shipped to the southern resort, but of course was not started in any of the races.

The *Challenger*, recently purchased from Smith & Mabley, did excellent work with A. D. Proctor Smith as pilot. She took two handicaps the first day, winning the H. N. Flagler trophy for the four-mile handicap in 8:41 2-5 and the Charles F. Bingham cup for the four-mile handicap in 11:59 1-5; ran a kilometer on Thursday in 1:21, breaking the world's record; won the Beach Club cup in the two-mile special handicap on Friday in 5:28, and to-day finished her work here by lowering the world's auto boat mile record to 2:04 1-5. The time for the mile was made with the wind; against the wind her time was 2:05 4-5.

The course was one of four miles on Lake Worth, finishing in front of the official boat, and the newspaper men were carried up and down the course in the fast press boat. The water in Lake Worth is about eight feet

Thompson and his party.

The summaries of the racing, which ended to-day, are as follows:

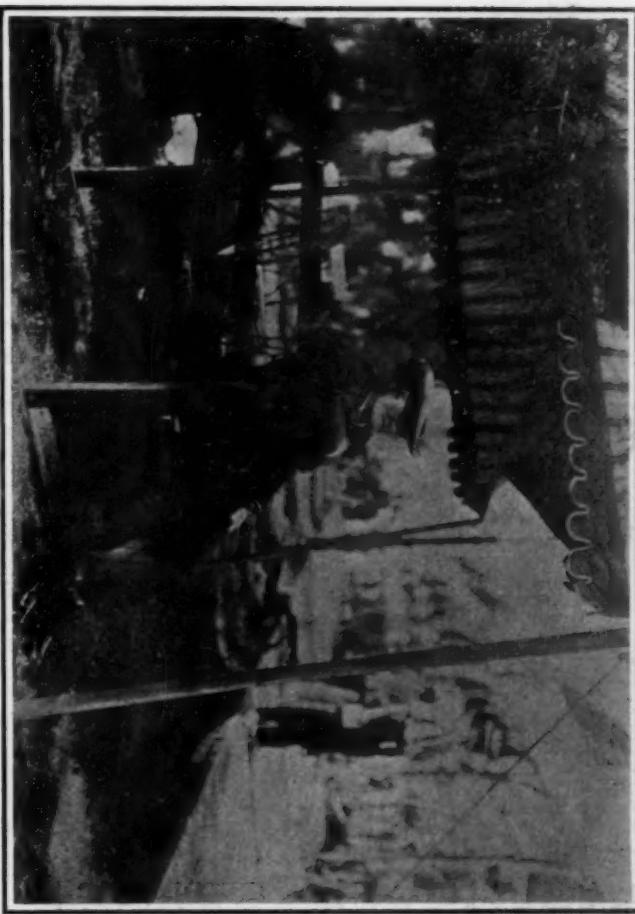
### WEDNESDAY, FEBRUARY 1.

Endurance Race, 8 miles, open to all classes, for the Breakers Cup.—First, *Shadow*, Geo. E. Andrews; time, 44:11 2-5; second, *Scout* L. P. Peltier, 46:54; third, *Shrimp*, Alexander Stein, distanced.

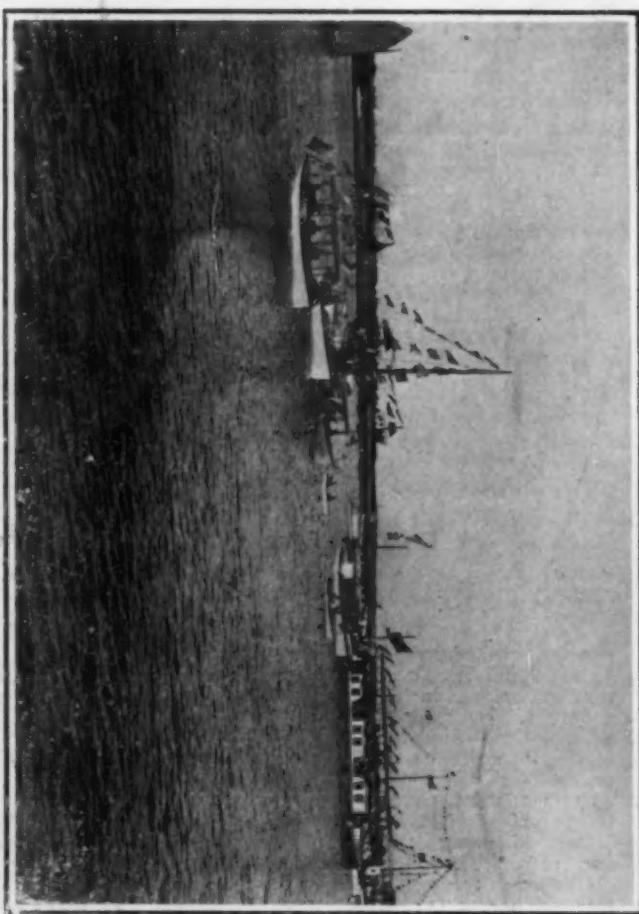
One mile for motor boats with speed of less than 12 miles an hour for the Lieutenant Willoughby Cup.—First, *Shadow*, time, 5:16 3-5; second, *Olive*, A. J. Sanderson, 5:28 3-5; third, *Histed*, E. W. Histed, 7:24; fourth, *Thelma*, O. O. Poppleton, 7:42 3-5; fifth, *Air Ship*, J. S. Chapin, 9:49 1-5.

Four-mile handicap for high-speed boats for the H. M. Flagler trophy.—First, *Challenger*, A. D. Proctor Smith, elapsed time, 13:56 2-5; handicap, 5:15; net finish, 8:41 2-5; second, *Comet*, Geo. D. Dewey, elapsed time, 14:14 2-5, handicap, 2:00, net finish, 12:14 2-5; third, *Grant Ferris, Jr.*, M. C. Thompson, 14:14, no handicap; fourth, *Wriggler*, C. C. Burgoyne, elapsed time 21:34, handicap, 1:00, net finish, 20:24.

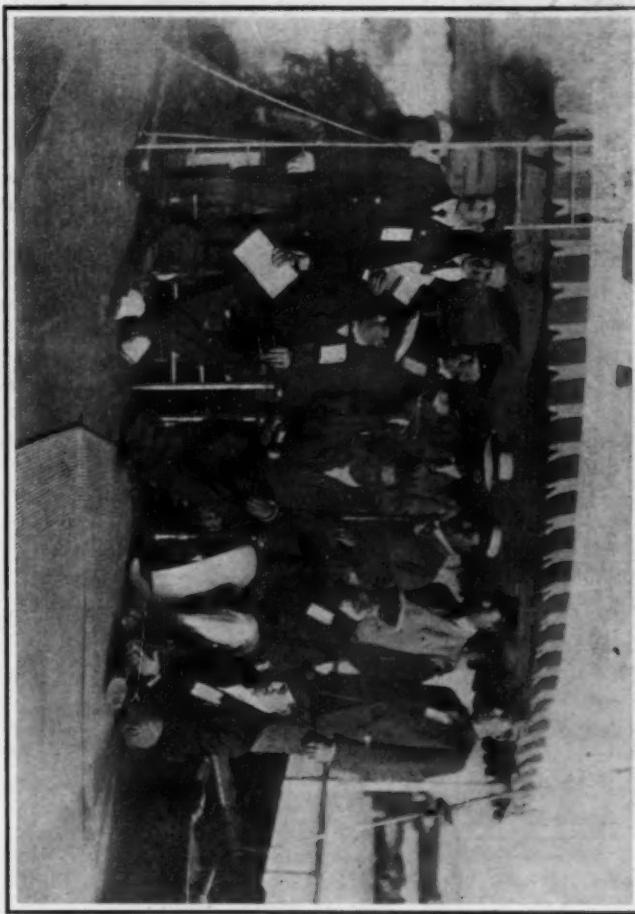
Four miles, for pleasure boats with speed of less than 12 miles an hour, for the *Automobile Magazine Cup*.—First, *De*



Joseph Jefferson "Rusticating" in the "Sunny South"—He has a Launch at Palm Beach.

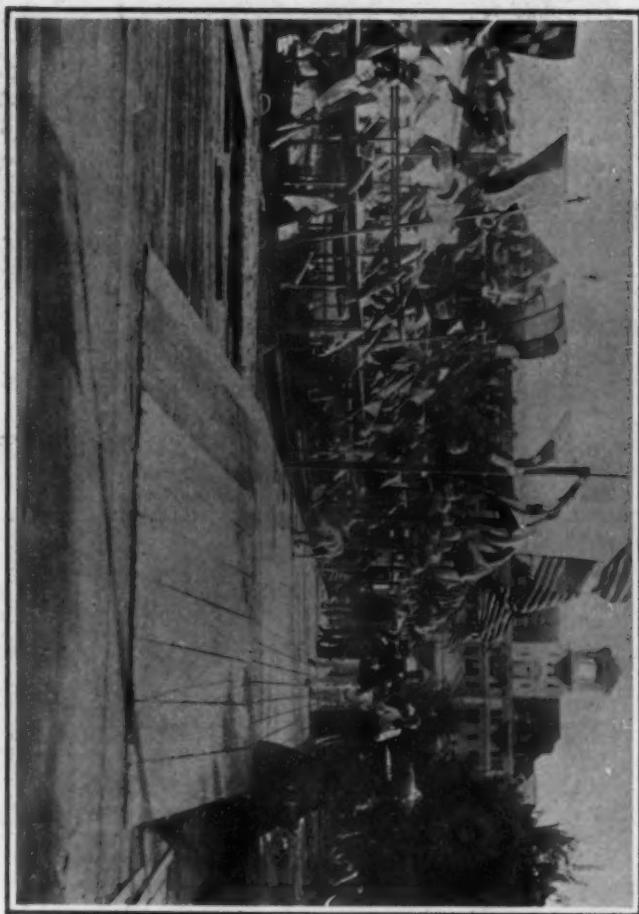


Committee Houseboat "Everglades" and Private Launches Decorated and Lined up Along Course.



Group of Officials Watching Races from Deck of Committee Boat.

SNAP SHOTS MADE AT PALM BEACH, FLORIDA, DURING POWER BOAT REGATTA ON LAKE WORTH, FEBRUARY 1 TO 4.



*Mooy*, T. G. Ronald, time, 19:58; second, *T. Rose*, W. I. Huffstetter, 21:58; third, *Globe*, J. C. Hancock, 25:04 1-5; fourth, *Histed*, 26:01 1-5.

Four-mile handicap, for the Charles F. Bingham Cup.—First, *Challenger*, elapsed time, 24:59 1-5; handicap, 13:00, finish, 11:59 1-5; second, *Comet*, elapsed time, 26:07 2-5, handicap, 11:00, finish, 15:07 1-5; third, *Shrimp*, elapsed time, 32:36 2-5, handicap, 5:00, finish, 27:36 2-5; fourth, *Scout*, elapsed time, 32:40 2-5, handicap, 6:25, finish 26:15 2-5; fifth, *Shadow*, elapsed time, 39:16 4-5, handicap, 4:30, finish, 34:46 2-5; sixth, *Argo*, elapsed time, 58:21 4-5, no handicap.

Four miles for cabin boats, for Joseph Jefferson Cup.—Out of four entries but one starter appeared, so the race was declared off.

#### THURSDAY, FEBRUARY 2.

Four miles, for motor tenders, sweepstakes.—First, *Everglades*, Colonel Thompson, elapsed time, 29:22 2-5, corrected time, 27:02 2-5; second, *Porpoise*, J. K. Clark, elapsed time, 29:20 3-5, corrected time, 27:52 3-5; third, *Ruffhouse*, A. R. Whitney, elapsed time, 32:27 1-5, corrected time, 32:07 1-5; fourth, *Lotus, Jr.*, Greer Hersh, elapsed time, 33:42 2-5, corrected time, 32:22; fifth, *Iris, Jr.*, J. K. Clark, elapsed time, 33:01 3-5, corrected time, 32:41 3-5.

Four miles for auxiliaries, for the E. M. O'Neill Cup.—First, *Huma*, Ralph Worthington, time, 24:00 3-5; second, *Amberjack*, Florida East Coast Hotel Co., 28:13 3-5; third, *Orchid*, F. Foster, 33:18; fourth, *Kingfish*, E. B. Warren, 35:12.

One kilometer trials.—*Challenger* the only entry. Time, 1:21, world's record.

One-mile trials.—*Challenger* the only entry.—Time, 2:11 2-5.

Four-mile A. P. B. A. handicap, for boats with speed of less than 12 miles an hour, for the Louis S. Clark trophy.—First, *Wriggler*, elapsed time, 36:34, corrected time, 21:24; second, *Grant Ferris, Jr.*, elapsed time 36:39 3-5, corrected time, 22:03 3-5; third, *T. Rose*, elapsed time, 36:43, corrected time, 24:44 2-5; fourth, *De Mooy*, elapsed time, 32:55 2-5, corrected time, 27:15 3-5; fifth, *Histed*, elapsed time, 33:25, no handicap.

Twenty-mile handicap for Howard Gould trophy.—*Grant Ferris, Jr.*, the only boat to finish. Time, 3:6:20.

#### FRIDAY, FEBRUARY 3.

High-speed motorboat handicap, one mile, for Sir Thomas Dewar's trophy.—First, *De Mooy*, corrected time, 7:07 2-5; second, *T. Rose*, corrected time, 6:32 2-5; third, *Shadow*, corrected time, 6:51; fourth, *Westrell*, corrected time, 7:00 1-5; fifth, *Wriggler*, corrected time, 6:25 1-5.

Special handicap of two miles for the Beach Club Cup.—First, *Challenger*, corrected time, 5:28; second, *Grant Ferris, Jr.*, corrected time, 8:29; third, *Comet*, corrected time, 7:36; fourth, *Westrell*, corrected time, 11:29; fifth, *De Mooy*, corrected time, 13:45 3-5; sixth, *T. Rose*, corrected time, 12:57 4-5; seventh, *Wriggler*, corrected time, 12:06.

Eight-mile high-speed motorboat handicap, for Royal Poinciana trophy.—First, *Comet*, corrected time, 25:30; second, *Challenger*, corrected time, 16:33; third, *Westrell*, corrected time, 38:37 1-5; fourth, *T. Rose*, corrected time, 45:59 2-5.

Glass cabin motorboats, for the Pemmery Cup.—First, *Enterprise*, corrected time, 12:36 3-5; second, *Izaak Walton*, corrected time, 13:25; third, *Kathleen*, corrected time, 14:30 2-5.

Eight miles, for motorboats under 18 miles per hour, for the W. Gould Brokaw

Cup.—First, *Wriggler*, corrected time, 43:46 2-5; second, *De Mooy*, corrected time, 45:13 2-5.

#### CHALLENGER'S NEW MILE RECORD.

##### Special Correspondence.

MIAMI, FLA., Feb. 7.—The mile record of 2:04 1-5, made by *Challenger* at Palm Beach last Saturday, was lowered to 2:02 here to-day over the channel of Biscayne Bay opposite the Royal Palm Hotel. A fifteen-mile course is being laid out in the bay for power boat racing.

A number of automobilists and motor boat enthusiasts will sail from here to take part in the events at Havana, which begin on the 10th and conclude Sunday, February 12. The Havana club is reported to be making elaborate preparations for the tournament, having secured liberal subscriptions from the hotels and club members.

Four American entries are assured for the Cuban automobile races, as follows: O. F. Thomas' 60-horsepower De Dietrich, H. W. Fletcher, driver; E. R. Thomas' 90-horsepower Mercedes; R. E. Jarrige's 80-horsepower De Dietrich, Charles Canault, driver, and Major Miller's 30-horsepower Renault, bought from W. Gould Brokaw, Joseph Tracy, driver.

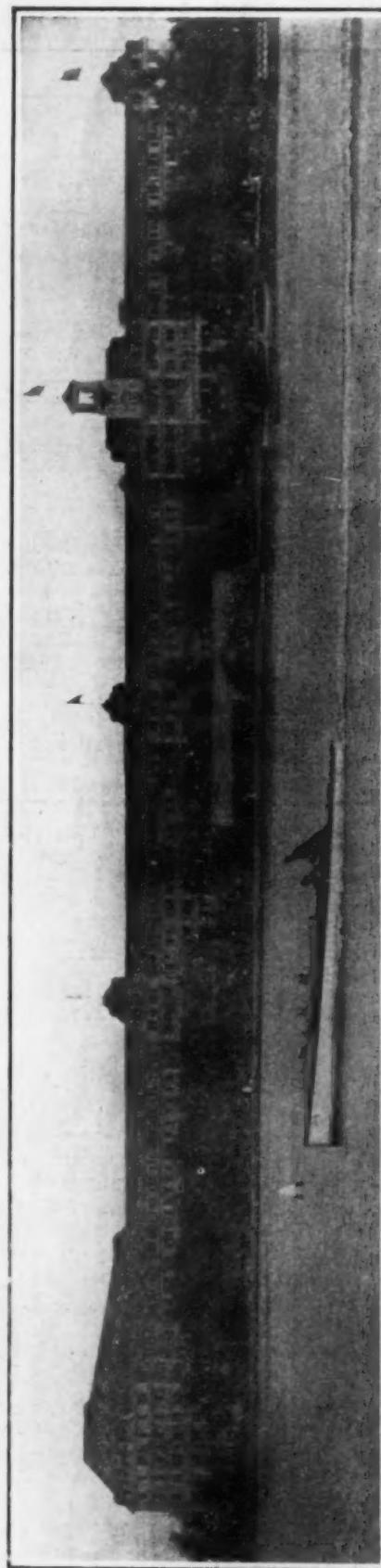
Five other cars, including two White touring cars, are among those shipped from Ormond to Havana, and it is reported that William Wallace's 90-horsepower F.I.A.T. has also been shipped and will take part in the races in Cuba.

#### International Sports Fair.<sup>1</sup>

##### Special Correspondence.

PARIS, Jan. 27.—An international exposition is to be held in the French capital in the year 1907. It will not be a repetition of the great fair of 1900, but a complete exhibition of sports, in which the automobile will figure very largely. It is not in any way the product of the promoters of the annual Paris automobile Salon, nor is it a substitute for the monster fair which Paris holds every ten years, although the proposal has been made that smaller trade exhibitions should take the place of this colossal event.

Last month the Chamber of Deputies voted that a sporting exhibition should be held in 1907, and this week the movement took its first official step, in the form of a meeting of the commissioners, presided over by the Minister of Commerce, M. Trouillot, who has always shown himself keenly interested in the automobile sport and industry in France. Two sub-committees were appointed, one having charge of administration and finance, and the other dealing with automobiles, sports, and general advertising. At the meeting the Marquis De Dion indicated that automobilism, owing to its wide-reaching influences, should play a predominating part in the proposed exhibition. A glance at the names of the gentlemen forming the general commission is ample proof that such will be the case. Apart from thirteen or fourteen deputies and senators, the follow-



SATURDAY, FEBRUARY 4.

Mile-trial by *Challenger*. Time, 2:2 4-5.

ing well-known automobile leaders sit on the committee: The Marquis De Dion, Baron Zuylen, president of the French Automobile Club; Colonel Renard, Monsieurs Darracq, Peugeot, Clément, Mors, Max

The choice of a site for the exhibition was discussed, and naturally the Champ de Mars, which formed a large part of the 1900 world's fair, was carefully considered. The big machinery hall used for this event

The net-work of canals in Flanders, says United States Consul Mowrer, of Ghent, Belgium, terminating at the seaports of Neuzen, in the Netherlands, and Ostend and Zeebrugge, in Belgium, offer great induc-



LAKE WORTH AND WEST PALM BEACH FROM HOTEL POINCIANA, PALM BEACH.

Henry M. Flagler's Residence at Left, Cocoanut Palms in Center Foreground and Hotel Pavilion at Right. The Palm Leaves Have All Turned Brown After the Freeze of January 24-25, and Many of the Beautiful Moonfish in the Lake Were Killed.



CROSSING HALIFAX RIVER BRIDGE TO ATTEND RACES AT DAYTONA. Several thousand spectators were obliged to walk the one and one-half miles from the railroad station at Daytona to the Sea Beach whenever the automobile races were started at the Daytona end of the course. Note the strong, cold north wind blowing.



TWO-THOUSAND-POUND CATCH OF FISH AT PALM BEACH. Negro Fishermen Tossing Bluefish and Pompano from Seine Higher Up on Beach Out of Reach of Incoming Tide. Catch Landed Near The Breakers Hotel.



MIAMI RIVER, FLORIDA, LOOKING TOWARD BISCAYNE BAY, WHERE "CHALLENGER" MADE MILE RECORD OF 2:02 ON TUESDAY. Corner of Royal Palms Hotel on Left, Private Yachts in River Mouth and Houseboat at Right.—A Fifteen-Mile Course is Being Marked Out in the Bay for an Auto-Boat Tournament Projected for Next Winter.

Richard and Vedrine, the president of the French Touring Club, and the president of the Sporting Committee of the French Automobile Club.

is still standing, notwithstanding the frequent decisions of the Paris municipality to abolish it. Nothing, however, was decided as to the site.

ments for the use of motor boats, and a considerable number are owned in Ghent. Though there are several local manufacturers, American motors are preferred.

## German Club Protests to France.

*Special Correspondence.*

PARIS, Jan. 27.—Certainly the French Automobile Club does not possess the rare quality of pleasing everybody. After the vigorous protest on the part of the British Automobile Club and the crusade of the London press, followed immediately by the official protest of Switzerland, comes a letter from the German Automobile Club announcing that there is dissatisfaction on the other side of the Rhine. The letter is as follows:

"After having received your communication regarding the conditions which ought to govern the race for the Grand Prix, we have the honor to inform you that in all probability we shall not be disposed to compete for the International Cup if these two events are run at the same time. As it is probable that the other automobile clubs will take the same attitude as ourselves, we beg you, in the interests of the International Cup, which has become the classical race of the automobile world, to change your decision."

### FRENCH REPLY TO BRITISH PROTEST.

A reply has not yet been prepared, but the attitude of the French Automobile Club is clearly outlined in the letter which has been sent in reply to the British protest. The letter states:

"We are surprised that this news (the uniting of the Gordon Bennett and Grand Prix races) should have so affected you as to call forth a protest, for there is no innovation in our decision, as already on two occasions—in 1901 and 1902—the Gordon Bennett Cup has been run as an accessory race, namely, in Paris-Bordeaux and in Paris-Vienna; we believe that the result has not been in the least affected by this arrangement, and you will remember that it was in the Paris-Vienna race that the English car carried the trophy back to England. The cup has already been run five times, three of them as a single event and two in connection with another race, without any change in the form of engagement. There was, therefore, no reason to advise you before December 31, 1904, as this had never been done on previous occasions." After recalling the interest the French Club has always shown in the Gordon Bennett Cup, the letter adds: "Constructors have always been insufficiently represented, and have been placed at a disadvantage with regard to one another. It must not be forgotten that in the spirit of the founder, the Gordon Bennett Cup was created to incite the emulation of the important automobile clubs, and it would be a departure from the lines laid down by him to give to this contest a significance which at the beginning it never possessed. We believe that the Grand Prix of the Automobile Club will combine all the conditions necessary to constitute a course in which all builders of every country will be happy to take part

and proud to win, for this victory will have been obtained with arms rendered equitably equal. After stating that this year's race is but a repetition of the 1901 and 1902 conditions, the letter terminates with the hope that the Automobile Club of Great Britain will continue to maintain the same happy relations with the French club as in the past.

### ENTRIES FOR FRENCH PRELIMINARIES.

To the attacks of the London press not a word is said in reply by the Parisian papers, apart from the automobile journals. Entries for the French preliminary races come in but slowly, but under the surface there is great activity, and a number of entries may be expected in a few days. The following cars have been already officially entered:

1. Panhard & Levassor, Heath.
2. Panhard & Levassor, H. Farman.
3. Panhard & Levassor, Teste.
4. Charron-Girardot & Voigt, Girardot.
5. De Dietrich, Gabriel.
6. De Dietrich, Rougier.
7. De Dietrich, Duray.

The three Richard-Brasier cars will doubtless be entered by the end of the month. The Hotchkiss team will probably be composed of Achille Fournier, Le Blon and Lavergne.

### AMERICAN PROTEST SENT.

#### Letter to French Club Sent by A. C. A. Through European Representative.

The action of the Automobile Club of France in deciding to run the Gordon Bennett race in conjunction with a race for a new trophy, to be called the Grand Prix, has called for a strong protest from the Automobile Club of America, which has sent a letter of protest to Clarence Gray Dinsmore, representative of the A.C.A. in Europe, to be forwarded to the A.C. of France at his discretion. This roundabout method is merely a courteous recognition of the foreign representative of the American club, and it is practically certain that Mr. Dinsmore will turn the letter over to the French organization.

The letter, which is addressed to Baron de Zuylen de Nyeveld, President of the A.C. de France, objects to the new arrangement on the ground that it is prejudicial to the chances of the American contestants on account of the large number of cars running in the double contest; that the winner of the Gordon Bennett cup, if he be not also the winner of the Grand Prix, will in effect be robbed of the prestige of winning the blue ribbon of the automobile world; that the new plans place the A.C.A. in a false light with the American entrants for the Gordon Bennett cup race, for, whereas they

expected to compete with three representatives of each competing country, they will, under the proposed arrangement, be confronted with ten or more cars from France alone, and further, that the French club's plans were brought to the notice of the American club only after the entries of American cars had been accepted in good faith. Concluding, the letter states:

"It has always been the desire of this club to assist in promoting any races undertaken by your club, and to give you, the pioneers in automobile matters, our hearty co-operation, but we feel that at this time we cannot do it in justice to ourselves, our candidates and the Gordon Bennett cup race."

### French Attitude Explained.

*Special Correspondence.*

PARIS, Jan. 25.—It is perhaps not surprising that when the Americans or British or Germans come to dissect the reasons which have prompted the French in creating the Grand Prix de l'Automobile to take the place of the Bennett Cup race they are inclined to put too much stress on some of these reasons and minimize the importance of others. The French say that they have had too much of the Bennett competition, because, in the first place, it gives an unfair advantage to countries that turn out only a few cars, and it tends to destroy the true sporting spirit which gave so much absorbing interest to automobile racing in the past.

As James Gordon Bennett instituted the trophy with the idea of stimulating international competition in the automobile industry, it was bound to be given a more or less commercial character, although, when we consider what a small place it occupied in the racing calendar so long as it was held at the same time as the great speed contests in France, no one could have foreseen that as soon as the cup was taken abroad by a mere fluke, it would become of real international importance, and that all the countries, and even those that were turning out less than 100 cars a year, would spend any amount of money in an attempt to get hold of the cup, which was looked upon as the outward and visible sign of automobile supremacy.

It is certain that even the French would have had nothing to say against a competition which aimed at setting up other countries in rivalry against themselves if they felt that it was bound to be carried off by the best car running in the race. Unfortunately, automobile contests do not give the same positive results as horse racing, in which the best horse is bound to win at even weights, if in good form and properly handled. It is possible to put the best motor car ever turned out of a factory in a race, and it will yet have any number of chances against it through many little things that cannot be foreseen, such as punctured tires or leaking radiators, and

it must be admitted that when the cup does not necessarily go to the best car, it can hardly be taken as a sign of supremacy in the automobile industry. The French are of the opinion that the only way by which the chances can be equalized, so that the cup will go to the country turning out the best cars, is to decide the result by points, or, in other words, to make the Bennett contest a team race. This suggestion was put forward by the Marquis De Dion, who wanted to see the placings totaled up in points, and at the same time increase the distance to 1,000 kilometers, or 621 miles, so that the question of reliability would come in as well as the factor of speed; but on the foreign clubs refusing to accept any such amendments, the Marquis decided on offering a cup of his own for a race to be run off under the conditions he would have liked to see adopted for the Bennett contest. It is very probable that the De Dion cup contest will be inaugurated in 1906.

In discussing this question, another thing that should not be forgotten is that the French, while objecting to the alleged unfairness of staking their enormous interests against those of other countries in a purely advertising race, have for a long time feared that the Bennett contest would stand in the way of a revival of the sport in France. At the time of the Paris-Madrid race the government stated that it would authorize no more racing on the public highways, and therefore the Bennett competition itself would have been doomed had it not been possible to hold it abroad, first in Ireland and then in Germany. The cup race has had a very encouraging result in that the systems of organization adopted abroad showed the French that it was quite possible to hold races on big circuits with perfect safety, although, of course, at enormous expense to the organizing club. The success of the German car in Ireland spurred the French trade to fresh exertions. An eliminating trial was carried out in France and organized with as much care as the race in Ireland, and the government was not only brought to see the commercial importance of this event, but also the possibility of running it off with entire absence of danger, at least to the public. This has revived a hope among the French trade of being able to return to the old state of things that existed before the suppression of racing, when open contests were organized, more with the idea of interesting the public in the automobile than of bringing business to manufacturers themselves.

Of course, no maker will go to the expense of building racing cars unless he can profit from it in some way, and in the old days he not only benefited from his successes in winning races, but he was able to find wealthy sportsmen who would take the expensive cars off his hands for the sake of driving them in the open events. This kind of sport did far more good to

the automobile industry than can be expected from the holding of a single race like the Bennett fixture, for which cars have to be built at enormous cost, and then remain on their makers' hands because there are no more races in which they can be used. It should not be forgotten, too, that the trade has for some time past been in anything but a satisfactory position, and this manufacturers believe to be due to the fact that wealthy sportsmen have not sufficient opportunity of using high-powered cars. They think that all this would be changed by a revival of racing, which it is hoped will follow upon the forthcoming Grand Prix de l'Automobile, over a permanent circuit, where the expense of organization will not be so high as would be the case if a new course had to be selected every time.

A point that may give rise to severe criticism is the action of the French club in deliberately trying to crush the Bennett competition. As the Bennett cup and the Grand Prix are to be run off together, it follows that the former will be entirely eclipsed by the greater importance of the Grand Prix, which will be equally international in character, and will have the advantage of offering heavy money prizes. The French have a perfect right to say that they do not want to go to the expense of organizing two races when they can both be run off at the same time, but it would have been better to avoid this equivocal attitude by the French declaring that they would withdraw from the Bennett competition altogether, leaving some other country to carry out the race if it thought fit to do so. When we come to see the way in which the Grand Prix is being hedged around, it is evident that in organizing the new race the French are not quite so

disinterested as they appeared to be in view of their argument against the Bennett Cup contest. Having taken up such an attitude, the only logical thing they could have done would have been to make the Grand Prix an open race, so that foreign countries would be able to show in as strong force as they possibly could. In this way no one would have complained of undue advantage. At the same time, the industry has grown so enormously that an open race would certainly attract far more competitors than would be at all safe, and therefore it has been decided to limit the number of cars running to forty-two, including the twenty-one in the cup contest.

As the entries are limited, each country is to be represented in proportion to its productive capacity, and it is very curious to see the way in which this proportion is made out. France, America, England, Germany, Italy, Switzerland and Austria would each have three cars in the cup race, and in addition France will have twelve, Germany three, England three and Belgium three, this last country having decided not to compete for the cup. Thus we find France with fifteen cars, England and Germany with six each, and the other countries three each. The fact that America is put on the same footing as Switzerland, Austria and Italy would lead one to think that the French Automobile Club has yet to learn that there is such a thing as a large and progressive automobile industry in the United States, and it seems likely that there will always be trouble over the Grand Prix race until French organizers look into the conditions of the automobile industry abroad and see that there are other countries besides France which are making headway in the manufacture of motor cars.



This is the first of the ten silver medals ordered by James Gordon Bennett to be made by A. Aucoc, of Paris, for presentation to the winners of the Gordon Bennett trophy to date. One is to be given for each annual victory to the makers of the winning car, and one to the driver of the victorious machine. Each medal will bear the date and distance of the race won and the time of the winner, together with the name of the makers of the car or of the driver, as the case may be. The medals will be distributed, two to Panhard & Levassor, one each to the makers of the Napier, Mercedes and Richard-Brasier, and one each to Charron, Girardot, Edge, Jenatzy and Théry.

## Fourth Annual Belgian Show at Brussels.

His Majesty King Leopold formally opened the fourth annual Belgian automobile salon in Brussels on Saturday, January 14, dramatically driving right into the building in his automobile. Besides carefully inspecting many exhibits during several visits to the show, His Majesty purchased one of the cars exhibited by a Belgian firm.

The Palais du Cinquantenaire, where the affair was held, contained more than 200 stands, and though a great part of the exhibits had been seen at the Paris Salon, nevertheless the show was a great success from a business standpoint, and a most interesting one from the point of view of the spectator. The decorations were particularly fine. Commercial vehicles were much

The Pipe cars were well represented, a new touring car chassis attracting especial attention. The builders of these cars also turn out vehicles for business purposes, and exhibited a public omnibus which is to be used in Italy.

Minerva motors occupied a large space. These are best known as motorcycle engines, and are used largely on the Continent and in England; but this year some small cars with 5-horsepower motors were displayed, and elicited much favorable comment.

The Société Metallurgique, of Marchienne-sur-Pont, exhibited five complete cars and two chassis, and the attendants at the stand were particularly well pleased with the business done during the Salon.

Other Belgian firms exhibiting were De Cosmo, Mathieu, Direct, Linon, Dasse, Mecanique et Moteur, Bovy, Vivinus, La Locomotion (built under Rochet-Schneider

Baron de Crawhez, who is possessed of boundless energy in the promotion of good roads movements, had in a gallery an exhibit of some large and terrible stone paving blocks taken from a road before it was recently put in usable condition as a result of his efforts. The Cranick portable garage was an object of much curiosity to the spectators, few of whom had seen such a thing. Albert Mans, of Dieghem exhibited a shock absorber of his own invention. Samson, Desclee, Houben and other anti-skid tire bands were also shown.

## WHY DUTY WAS RAISED.

### Canadian Minister of Finance Changed Classification of Autos.

#### *Special Correspondence.*

TORONTO, Feb. 6.—The raising of the duty on automobiles imported into Canada from 25 per cent. to 35 per cent. will no doubt



GENERAL INTERIOR VIEW OF BELGIAN AUTOMOBILE EXHIBITION, HELD IN THE PALAIS DU CINQUANTENAIRE, BRUSSELS, JANUARY 14-24.

in evidence, the Belgians having devoted a good deal of attention to this branch of the automobile industry; business vehicles were, in fact, one of the features of the show. It is considered that the salon indicates a long stride in advance by the Belgian industry as a whole.

The Compagnie Germain had a large exhibit which attracted much attention, as this concern enjoys an excellent reputation; one of its cars is owned by King Leopold, who purchased another at the salon, which, of course, had a very beneficial effect on the business of the firm. Commercial vehicles are a specialty with this company, and among those exhibited was an omnibus, one of a lot of sixty ordered by the London Road Car Company. A chassis was shown with 24-horsepower motor; a six-seated limousine on a lengthened 24-horsepower chassis, the body by Van den Plas; a 35-horsepower touring car, and several other machines, light and heavy.

patients), and Excelsior. Altogether fourteen Belgian firms exhibited.

Among French cars exhibited were the Aries, C. G. V., De Dion, Panhard, Clement-Bayard, Darracq, Renault, Rochet-Schneider, Delaunay-Belleville, Automotrice, Berliet, Decauville, Fouillaron, Hotchkiss, Gregoire, Mors, Richard-Brasier, Unic and Radia. Germany was represented by the Mercedes, Benz and the Neue Automobile Gesellschaft; the United States by the Oldsmobile; Italy by the F.I.A.T. and Holland by the Spyker.

Some of the exhibits which were not automobiles or parts were of much interest. In this class was the 200-horsepower marine motor built by the Compagnie de Construction Mecanique for the auto-boat *Hilda*, which is to take part in the next Monaco regatta. Cockerill, of Antwerp, showed a steel fishing boat 37 feet over all, equipped with a 20-horsepower motor—apparently a very serviceable little ship

mean an increase in prices all around, and some of the local dealers are wondering what to do about orders that have already been sent to American factories.

According to the explanation given by the Minister of Finance, the former duty was adopted only temporarily when automobiles first began to be imported into Canada. Through the influence of J. N. Shenstone, an importer, automobiles were then classified as gasoline engines, with a comparatively low rate of duty, although the Minister held they should come in as vehicles. Now the Minister reaffirms his former view, and automobiles will henceforth be entered as vehicles, which are subject to a duty of 35 per cent. The change of course operates in favor of home manufacturers, of which there are now three: the Ford Motor Company, of Walkerville; the Packard Electric Company, of St. Catharines, making the Olds machines, and the Canada Cycle & Motor Co., of Toronto.

## Correspondence

### Price of Gasoline in Europe.

*Editor THE AUTOMOBILE:*

[147].—I intend taking a trip through Europe in my touring car, and will thank you to let me know the price of gasoline there.

M. MACD.

Toronto, Can.

Gasoline for automobile use is sold in England and on the Continent under the name of Pratt Motor Spirit. In the British Isles this sells for from 25 to 35 cents a gallon. A consular report, just issued by the Department of Commerce and Labor, quotes the price of gasoline in France at 7.72 cents per liter (1.05 quart), equivalent to about 29.4 cents a gallon. A New York motorist who toured extensively in Europe a year ago states, however, that the price throughout France is 40 to 45 cents, while in Paris the price is about 60 cents a gallon, owing to an excise tax known as the octroi, which is imposed at the city gates upon all gasoline brought into the city; even the contained fuel in the tanks of automobiles is measured at the gates, and the excise duty of 20 centimes per liter, or about 4 cents a quart, is collected. When a motorist drives out of the city he must declare the number of liters contained in the tank of his car, and upon his re-entry the quantity is officially measured, to see if more is being brought into the city than was taken out.

In Germany the price is about 60 cents, and in Italy it was 70 cents a gallon when our informant toured in that country.

### Measurements for Sliding Gears.

*Editor THE AUTOMOBILE:*

[148].—I would like to construct a three-speed and reverse sliding gear transmission for a 24-horsepower automobile, and wish to obtain from you the following measurements:

What pitch and width of gears should I use?

What diameter should the gear shafts be?

What should be the distance between the shafts, and what length should they be?

What is the closest arrangement of gears for this purpose?

What should be the size of the claw clutch for the direct drive?

H. B. G.

Hamilton, Ont.

To answer your questions fully would necessitate a thorough knowledge of the particular car and the purposes for which it is to be used; and then it would be necessary practically to design the transmission—quite an undertaking. It may be said, however, that the gears should be 6 pitch and 7-8 inch face. This is a good average

width, though some makers use narrower gears and some wider. The diameter of the shafts will of course depend somewhat upon their length, but the average shaft for a 24-horsepower transmission should be at least 1 1-8 inches in diameter. The squared shaft should be not less than 1 1-8 inches square. The diameters of the gears will depend altogether upon what speeds you wish to obtain, and what relation the low speeds are to bear to the high. The diameters of the gears will determine the distance between the shafts. For the sake of economy of space, the pinions should be as small as possible; but it is not advisable to make the smallest much less than 2 1-2 inches in diameter, as the wear on each tooth increases as the number of teeth decreases. The positive clutch for the direct drive should be approximately 3 inches in diameter and 1 inch deep.

These replies are necessarily somewhat general. If you desire to design a transmission for yourself it would be advisable to devote some study to the principles governing the use of gearing in general, and automobile change-speed gearing in particular. Unless you have some particular object in view in designing your own gear, you will probably find it more satisfactory as well as cheaper in the long run to purchase a well-designed transmission, of which there are a number on the market.

### Work Done by the Radiator.

*Editor THE AUTOMOBILE:*

[149].—The true importance of the radiator in its relation to the hydrocarbon engine is not only under-estimated by the lay owner of an automobile, but even some engineers and manufacturers appear to have little conception of the function of this feature of the power system of an automobile and the best form of construction to result in the greatest efficiency.

A test made by the writer on a well-built, high-speed engine showed the percentage of heat units the radiator is compelled to throw off in proportion to the work performed, as follows:

	Per cent.
Turned into work.....	30
Taken up by the water jacket.....	40
Escaped through the exhaust.....	28
Loss by direct radiation.....	02
	<hr/>
	100

This test was made on a 24 brake horsepower engine, using 0.6 lb. of 72 degree gasoline per horsepower per hour. The engine being exceptionally well proportioned and made, the fuel consumption was very low; on other tests made the fuel used ran as high as 1 lb. to 1 1/2 lbs. per horsepower per hour, in which case the water had to carry off more heat units.

Gasoline having 11,000 heat units per pound, and as 6 lb. was used, 6,600 heat units were generated, 40 per cent. of which went to the water jacket, making 2,640 heat units per horsepower per hour for the

radiator to take care of. Therefore, with a full load of 24 horsepower, there would be 62,360 heat units per hour for the jacket water, while in an ordinary or inferior construction the work of the radiator would easily be doubled.

The temperature of the jacket water is another very important factor, as in a series of experiments it was found that a saving of 8 per cent. in gas consumption per brake horsepower was made by raising the temperature from 60 degrees Fahrenheit to 140 degrees F., 12 per cent. by raising it from 60 degrees to 170 degrees F., and 15 per cent. by raising the jacket water from 60 degrees to 200 degrees F., at which point the engine showed the highest efficiency.

It has been fully demonstrated by practical experiments that with the jacket water a few degrees below the boiling point the engine gives the highest efficiency, while the difference in temperature between the inlet and outlet should be the least possible; this difference can be brought to a minimum by the proper proportioning of the radiator and the flow of the water, bringing a more even temperature to all parts of the cylinder wall, and resulting in the greatest economy in fuel consumption and a greater efficiency by producing less friction through expansion and contraction.

Copper is the best material to use in the construction of a radiator, as it is the best conductor of heat of any of the several metals suitable for the purpose. The tubes, whether flat, round, rectangular or polygonal, should be of the thinnest gauge possible, the object to be attained being the rapid transmission of the heat units from the water to the outer air, which a thick wall hinders, owing to the comparatively slow passage of the heat through the metal. Thick walls in the tubes also reduce either the area of the wall in contact with either the water or the air.

To obtain the best result the volume and velocity of the air passing through the radiator have also to be considered. The tube walls being very thin, and transmitting a large number of heat units, it is very important that the volume and velocity should be in such proportion as to carry off a certain number of heat units, but no more, as a surplus of air would occupy valuable space, which should be utilized to gain efficiency and reduce the water supply necessary to properly cool the engine. For illustration, a tube one inch in diameter or one inch square would allow a volume of air to pass through the center that would not perform any function whatever. Having so large a volume, the velocity of the air would not be great enough to carry off the heat units supplied to the air in contact with the thin metal, while at the same time a large volume of air would pass through the center of the tube too rapidly to absorb any of the heat.

The writer and his associates have conducted a large series of experiments under all the conditions to which a radiator is

subject, and have demonstrated to their satisfaction the proper proportions of air volume and velocity to gauge of metal to produce the highest efficiency, while occupying the least space and requiring the smallest quantity of water.

N. W. SCHLATER,  
Mechanical engineer for the A-Z Co.  
New York.

**Explanation by the A.A.A. Secretary.**  
*Editor THE AUTOMOBILE.*

[150].—Having read your account of the Florida tournament and your editorial on it, it seems to me that some explanation is due to your readers as to the part that the "A.A.A. officials," to which you so often refer, actually played in the arrangement and conduct of the meet.

As to the arrangement, it should be clearly understood that the only detail in which the American Automobile Association had anything to do was the declaring of the meet an open one, instead of an invitation affair. Even this was done in an informal way, and the request to the Florida East Coast Association that the tournament be declared open was made, not by the Racing Board nor by the Board of Directors, but by a few of the officials personally. Such action as the Florida East Coast Automobile Association took in declaring the meet open *was not at the instance of the American Automobile Association, except that some of its officials suggested the action.*

The sanction for the meet was granted to the Florida East Coast Automobile Association, and they were the managers absolutely. They asked Mr. A. R. Pardington, chairman of the Racing Board at that time, to officiate as referee, and later, on account of his inability to attend, asked Mr. W. C. Temple, the present chairman, to officiate. This is the same plan that has been pursued by race meet promoters throughout the country, and it is well known that the chairman of the Racing Board, as such, has been asked to officiate at numberless meets during the past year.

They also asked the writer to officiate as clerk of the course and starter, not particularly because he was an official of the A.A.A., but because of some little experience that he has had in that line.

Aside from these two appointments, no other official of the A.A.A. played any part in the conduct of the meet, and what these two did they did personally as officials of the meet for the Florida East Coast Automobile Association, and not as officers of the American Automobile Association.

At many of our race meets on tracks there have been more A.A.A. officers acting in official capacity than there were in Florida, and had the meets been mismanaged no one would have thought to criticise the American Automobile Association for the part that a few of its officers took personally in it, but rather the actual management of the meet.

You refer lightly to the tide and beach conditions, but I assure you these were the

most important factors in what you term the mismanagement of the meet. With an early morning tide, on which, even starting at six o'clock, but an hour's racing could be secured, and a late afternoon tide, which, on account of darkness, permitted only of about an hour's racing, it was utterly impossible to get the events off in time to finish Saturday. Old inhabitants say that they have never seen the beach in such poor condition as during the first week of racing.

On Monday and Tuesday, with tide conditions changed materially for the better, there was no delay whatever in running the schedule off, barring the fact that after the one-hundred mile race the beach between Daytona and Ormond was so cut up that the contestants to a man refused to run the five-mile races over it. Rather than call these events off, the officials decided to run the races south, where the beach was good. The changing of the timing apparatus necessarily took some time, and possibly half an hour was wasted in making this change. I would like to say, however, that notwithstanding this delay, the entire program and schedule for Monday was satisfactorily completed over a beach that was fast—as is demonstrated by the times made—and which the contestants declared to be safe.

The main point, however, which I would like to bring out, is the fact that the American Automobile Association was not the manager of the Florida meet, and, aside from the two officials mentioned above, did not appear in connection with it in any way. These two officials were serving, not in their official capacity as officers of the American Automobile Association, but personally as friends of the Florida East Coast Automobile Association, appointed by it to positions in connection with the running off of the races, and not in connection with its arrangements or actual management.

It seems to me that your repeated reference to the mismanagement of the meet by the A.A.A. officials must come from some ulterior motive. As the secretary of the American Automobile Association, I wish to inform you that the matter of the Florida tournament has never been discussed in any way, nor any action taken upon it by the Board of Directors of the A.A.A., nor by the Racing Board, further than to the extent of granting a sanction for the meet. Consequently, what has been done must be attributed, not to the A.A.A. or its officers but to such of its officers personally as you believe had occasion to interfere in any way with Mr. Morgan's plans.

Personally, I am willing to take my share of the blame for the conduct of the meet, if you consider that blame attaches to any one, but officially, I had nothing to do with the meet, nor did the president nor any of the officers or directors or members of the Racing Board of the Association other than Mr. Temple, who acted as referee.

I sincerely hope that, in justice to the American Automobile Association and its

other officers whom you include in your sweeping statements, you will give publicity to the foregoing explanation.

C. H. GILLETTE,  
Secretary American Automobile Association  
New York City.

Even if it be admitted that technically the meet was arranged and managed by the local body, it will be a very difficult matter to establish the desired alibi to the extent of convincing the motorists who were present, or others throughout the country, who are at all in touch with the affairs of the A. A. A., that this body was not practically in charge of the management of the races and directly responsible for the long series of mistakes which ended so badly.

It is no deep secret that several of the leading officials of the A. A. A. were influential in inducing the officers of the Florida Association to turn the management of the meet over to the A. A. A., and that many of the revised plans, after the forced retirement of Mr. Morgan, were made at the Waldorf-Astoria and not in Florida. The entry blanks for the meet were signed with the name of the Secretary of the A. A. A.; and not merely with this name as a private individual, but in an official capacity as secretary of the A. A. A. There were present at Ormond the president and the secretary of the A. A. A., the racing board, and other prominent members, the daily program of the races was made out by the secretary and the chairman of the racing board, and its execution was attempted by them. The quarrels, disagreements, misunderstandings and resignations, were not between and on the part of officers of the Florida East Coast Automobile Association, but officers of the A. A. A. If the meet was actually under the management of the Florida association, and it only was responsible, why did the racing men, with a full knowledge of all the more private details, resign from the racing board of the other association which, as is now claimed, had nothing to do with the meet?

There is no question that blame should lie somewhere, for the public squabbles preceding the meet, the mismanagement on the ground, and the public scandal which must result from the widespread reports; and we still believe that this blame lies mainly if not solely with the American Automobile Association, for first assuming functions and responsibilities which in no way belonged to it, and then neglecting them. Whether the Association as a body has been placed in the present position through no fault of its own, but through the personal and unauthorized actions of a number of its officers, is a question which we need not discuss.

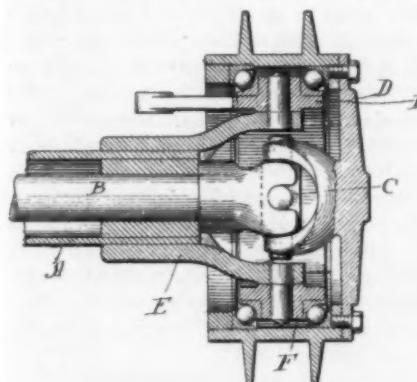
**The duty on automobiles imported from the United States into Canada, has been increased from 25 per cent. to 35 per cent. Customs charges on tires have also gone up proportionately.**

# Patents

## Steering Knuckles.

No. 777,727.—H. T. Hansen, of Milwaukee, Wis.

A combination steering knuckle intended for front drive machines. The axle *A* contains a driving shaft *B*, acting, through a central universal joint *C*, on a disk *D*, screwed to the wheel hub, which runs on ball bearings on a ring *F*, pivoted by the two vertical pivots shown to the forged



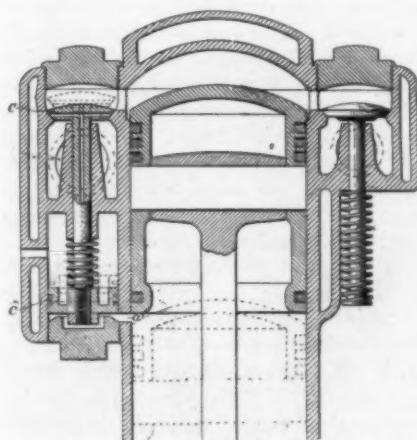
HANSEN'S STEERING KNUCKLE.

yoke end *E*. Although the specifications do not so state, it would seem that the invention is designed for machines in which all four wheels drive, and in which, therefore, only a moderate angle of deflection is required of any one wheel for turning.

## Automatic Exhaust Valve.

No. 776,708.—C. H. Way, of Lansing, Mich.

The intent of this device is to cause the



AUTOMATIC EXHAUST VALVE.

exhaust valve to be lifted by the pressure of the exhaust gases themselves, and to be held open by the same means so long as the pressure in the exhaust port exceeds that of the atmosphere. In the drawing, the exhaust valve *C* has attached to the lower end of its stem a piston *C'*, working in a chamber open, above *C'*, to the atmosphere,

and below it by a part *a* to the cylinder interior. Near the bottom of its stroke the main piston uncovers *a* and admits burnt gas at terminal pressure below *C'*. As the latter is larger than the valve head, the valve is lifted, and, once open, is kept so by an equilibrium of pressure above and below it, established by a hole drilled through the valve-stem as shown. The final closing of the valve is quickened by a spring.

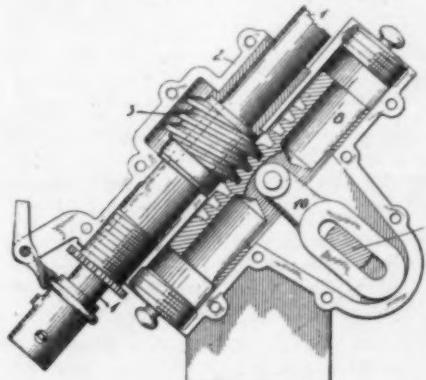
No. 780,482.—J. F. Duryea, of Springfield, Mass.

The double-shoe expanding toggle clutch used till this year in the Stevens-Duryea automobiles. It has a sleeve sliding on the shaft, and two opposite toggles pivoted thereto, whose free ends force the shoes outward against the clutch drum. Means are provided for adjustment of the toggles.

## Steering Gear.

No. 778,626.—F. H. Bogart, of New Britain, Conn.

An irreversible gear modified from the screw and nut type. A rack *s*, meshing with



IRREVERSIBLE STEERING GEAR.

the screw *3* on the steering shaft *1*, is guided in a cylindrical barrel forming part of the housing *2*. Pivoted to *8* is the arm *4*, a slot in which works over a flattened portion of the shaft *9*, to which the steering arm (not shown) is connected. The claim is that the wear on the screw will be less than that of a worm, since all the threads are engaged, and that the wear between *9* and *10* will be small on account of the limited movement required between these parts.

## Ignition System.

No. 780,555.—A. E. Doman, of Elbridge, N. Y.

An automatic device for use with an ignition dynamo to prevent the current generated from becoming excessive at high motor speeds. It depends on the fact that the resistance of two pieces of carbon pressed together is increased by relaxing the pressure between them, and it consists of two such pieces, pressed together by a spring, which is partially balanced by an electromagnet in the field current. The

main current to the spark coil passes through the carbon contacts, and is consequently governed by the intensity of the field current. The dynamo is compound wound.

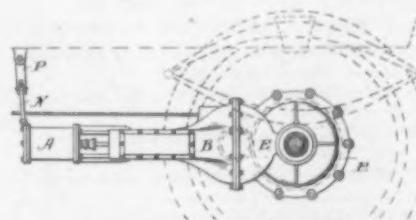
## Radiator for Air-Cooled Cylinder.

No. 778,425.—H. J. Muntz, of Poughkeepsie, N. Y.

A series of metal combs set into grooves in the cylinder wall, parallel with the axis, with the teeth of the combs embedded at their ends in the grooves.

## Axle and Engine Case.

No. 777,964.—V. Link, of Geneva, Ohio. The combination casing *B E*, constituting



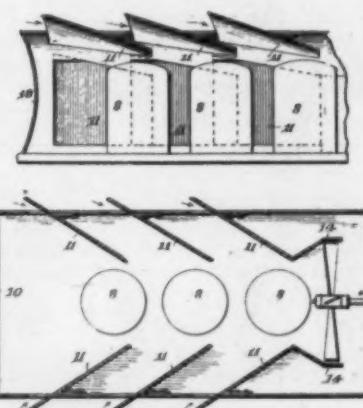
AXLE AND ENGINE CASE.

the crankcase of an engine and the differential housing in the rear axle of an automobile. The engine drives the axle by single reduction gear, and the end of cylinder *A* is hung from the body by the links *N P*, which are free to swing in any direction.

## Bonnet for Air-Cooled Motors.

No. 778,455.—R. C. Lewis, of Boston, Mass.

A bonnet having a wire net front *10* and wind-catching vanes *11* at top and sides. The vanes are carried inside the bonnet and are so located and spaced that they deliver air



LEWIS' MOTOR BONNET.

currents as directly as possible on the top and sides of the several cylinders *8*, to be air-cooled. A metal dust pan encloses the bottom of the motor space, and the rear-most vanes drop below the sloping foot-board and are extended to form a fan chamber *14*, in which the draft may be maintained when hill-climbing.

# THE AUTOMOBILE

VOL. XII.

No. 6

Published every Saturday by  
**THE CLASS JOURNAL CO.,**  
Flatiron Building, Madison Square,  
NEW YORK CITY.

Cable Address - - - AutoLand, New York  
Long Distance Telephone - - 300 Gramercy, New York

## SUBSCRIPTION RATES:

United States, Canada and Mexico, - One Year, \$2.00  
Other Countries in Postal Union, - One Year, \$3.00

To Subscribers—Do not send money by ordinary mail.  
Remit by Draft, Post-Office or Express Money Order,  
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## FOREIGN SUBSCRIPTION AGENTS:

ENGLAND:—Iliffe & Sons, Limited, 3 St. Bride Street,  
Ludgate Circus, London, E. C.

FRANCE:—Boyeau & Chevillet, 22 Rue de la Banque,  
Paris.

GERMANY:—A. Seydel, Mohrenstrasse 9, Berlin.

To Advertisers—Copy or changes in orders for advertisements should reach us not later than 5 o'clock p. m. Monday for the issue of Saturday following.

Copyright, 1905, by The Class Journal Company.  
Entered at New York, N. Y., as second-class matter.

The Automobile is a consolidation of The Automobile (monthly) and the Motor Review (weekly).

Copies Printed in 1904, - - -	639,300
" " This Issue, - -	13,500
" " Since Jan. 1, -	88,200

**Chicago's Fourth Annual Show.** The Chicago Show of 1905 has already proved itself as much of a success as its predecessor in New York, both as an evidence of material advance in automobile construction and from a business standpoint. The car exhibit is larger than ever in point of numbers, of higher excellence in the standard makes, and of more evenly high quality throughout; the attendance has also increased, and in a still greater proportion than in former years the users and intending buyers outnumber the mere spectators.

In point of originality and distinctive novelty, there is little to be said; those who had already attended the New York Show find essentially everything at Chicago that was at New York, and very little that was not. The principal exception to this statement is the collection of cars of moderate price from the Middle West, in no way notable in construction, but in quality and price well adapted to local requirements. "Freaks" have been almost wholly eliminated from the annual shows, both East and West.

While in no way threatening the position which the New York Show has thus far held and will hold in the future as the one great national exhibition of the automobile industry, the Chicago show has an

importance of its own as the great commercial exhibition for a wide and rapidly growing territory. From a purely commercial point of view, the show is well worth the study and support of all in any way connected with the automobile industry.

\* \* \*

**Freak Cars  
In Class Races.**

In spite of the very wide range allowed by all automobile bodies in the construction of racing machines, it is generally recognized that the established rules—such as they are—will be enforced in all record contests. That this course was not followed in the Florida meet has given rise to much dissatisfaction on the part of the majority of the competitors, men whose cars were strictly within the established limits.

The first honor of the meet, the cutting of the mile record, belongs to a legitimate racing-machine, well within the official limit of weight; but in the public estimation, at least, it has gone to a car, nearly 400 pounds over the weight limit through the addition of a second motor. It is not necessary to consider the motives of the owner, a very good sportsman, in building such a freak, and it was perhaps proper that, having built and taken it to Florida at heavy expense, he should be allowed the privilege of running it over the official course and being timed by the official timers. Nevertheless, by such action the moral, if not the legal rights of the actual competitors were infringed, and their hardly earned laurels were belittled. It will be a very difficult matter to disabuse the public mind in future years of the idea that the *bona fide* mile record of the world was broken in January, 1905, by Mr. Bowden's Bowden-Mercedes, and not by McDonald in a Napier; and that the record time is not 32 4-5 but 34 2-5 seconds.

The entry of the Ross steam racer was another blunder that might have been avoided by seasonable action. The car itself, like the Baker torpedo, and the first Cannon steam racing car, is a freak as compared with the racing machines with which it was classed; in its construction bearing no relation whatever to a practicable road car. To make matters worse, it was a steamer, all the others being gasoline cars, and by an accident it had the choice of position, at the pole.

Where the gasoline cars were at a disadvantage, especially in the shorter races, in having to run some distance before they were warmed up and in their best form, the steamer actually profited by any waiting about the line before the start, and slow movements in getting away, as it was constantly bottling up steam for a short dash. In the scoring, the matter was still worse; having the pole, the steam freak could make the pace to the line, coming at a speed which saved steam for it, and at the same time kept the gasoline

cars on their low gears, then when the start came, it was away like a streak, leaving the drivers of the gasoline cars fumbling over their change-speed gears.

It cannot be claimed that the special conditions in this case had any bearing on the legitimate dispute as to the respective merits of steam and gasoline for car propulsion, or that the obvious advantages on the side of the steamer in starting under such conditions indicated any special merit in the car or in the principle of steam propulsion. The clever builder and bold driver of the steamer simply took things as he found them, his entry being in due form and his handling of the car being strictly within the rules; but at the same time the great majority of the cars were compelled to race under an unjust handicap, and their records are proportionately poor. Even when built strictly to the rules, many modern racing machines are certainly freaks of most extreme type; if some men are not content with the opportunities for self-destruction thus afforded them, but must go further and build outside of the rules, they should either be barred entirely or placed in a separate class.

**The Gordon Bennett and the Grand Prize.** The unsatisfactory situation now existing in international racing, as the consequence of the action of the Automobile Club of France, in subordinating the Gordon Bennett cup to a new prize of its own, is very thoroughly discussed on another page, by our Paris correspondent. The individual phases of the dispute are also discussed at length, and with some fervor in the British and French papers, and in the official communications between the various clubs, but as yet no end is in sight.

While the dissent of the British club is echoed by Germany, America and other countries, it still remains to be seen how fully the other nations indorse the details of the British indictment of the French club. The most objectionable features, after all, are the seemingly deliberate attempt to submerge the Gordon Bennett cup under a new and very different race, and the abrupt and positive manner in which this change has been made without the formality of even a nominal co-operation with the other nations interested.

It is not unnatural that the French should be dissatisfied with the opportunity for international competition which is offered them by the Gordon Bennett cup, nor that they should desire to restore French *prestige* to that position which it enjoyed prior to the fatal failure of the Paris-Madrid road race, and the successful conduct of the Gordon Bennett contest under British management. These two events coming closely together in point of time, marked a great change in international racing; the open road race was killed by both official and public condemnation, at the same time

## THE AUTOMOBILE.

it was demonstrated that long-distance racing on public roads was possible under proper management, and in the final result the honors of the year went to a rival nation.

Had the two subjects of the Gordon Bennett cup and the future of racing in France been taken up early in the season by the A. C. de F., and discussed with the representatives of other nations, the present deadlock might have been avoided, and the difficulty solved in a way acceptable to all parties. Nothing was done, however, until the time of the Paris Show, just prior to the final closing of the Gordon Bennett entry list, when an agitation started in a small way by the editor of a French automobile paper, grew almost in a night into a popular movement through which hastily and without notice to other nations, a race of a very different nature was arranged to include and eclipse the older and more truly international event. It is impossible to predict the final outcome, but there can be no question as to the injury which has already resulted to the good name of international automobile racing.



It was, we believe, the Automobile Association of America which, last spring, proclaimed itself the sole and exclusive patron of auto boat racing in this country. Fortunately for the aquatic end of the sport, the A. A. A. has thus far had its hands full on land, and, except on paper, has not attempted to rule the waves.



The coming Sportsmen's Show at Madison Square Garden promises to be the first of a series of big annual launch shows; under the arrangements for this year launches and launch motors will be represented to the extent of about 90 per cent. of the total exhibit.

## FIRE CHIEF IN COLLISION.

Chief Croker, of the New York fire department, was making high speed in his automobile on the way to a recent fire when a trolley car suddenly emerged from a car barn directly ahead. A crash followed. Chief Croker was thrown out into a snowbank, from which he emerged unhurt but wrathful. The automobile was badly damaged, a rear wheel being torn off and the body crushed on one side, in addition to other disastrous effects of the collision. The chauffeur and a fireman who was in the machine escaped unhurt. Chief Croker stated that the accident was due to the carelessness of the motorman of the trolley car, who was suspended pending an investigation.

**Motor plowing** has been successfully tried in Italy, the plows being hauled from side to side of the fields by steel cables wound on drums by electric motors, the current being taken from neighboring trolley lines.

Charles J. Glidden, the Boston motorist, is reported to have reached Bluff, New Zealand, on his world-girdling automobile tour. Bluff is a cable station in the southern part of New Zealand, and is the most southern point yet reached by a motor car.

ELLIOT C. LEE ELECTED  
PRESIDENT OF A. A. A.

Succeeds Harlan Whipple. Whose Resignation Is Accepted — Chairman Temple's Resignation Tabled and Those of Vanderbilt and Wallace Withdrawn — Vanderbilt Cup Race Plans Discussed.

Harlan W. Whipple's resignation as president of the American Automobile Association was accepted at a meeting of the board of directors of that organization held in New York City on Monday, February 6. Elliot C. Lee, of Boston, president of the Massachusetts A. C. and of the Massachusetts State Automobile Association, was unanimously elected to fill the vacancy.

W. K. Vanderbilt, Jr., and William Wallace, of Boston, both of whom resigned from the racing board of the A. A. A., during the Florida tournament, withdrew their resignations. W. C. Temple's resignation as chairman of the board, which was also tendered during the Florida race meet, was laid on the table until further action shall have been taken at a subsequent meeting, it being understood that Mr. Temple will consent to serve as chairman pending the selection of his successor. A. R. Pardington, formerly chairman of the racing board, has reiterated his determination to decline re-election under any circumstances. William Wallace is spoken of as a probable future chairman in the event of Mr. Temple's adherence to his decision to retire.

Vanderbilt cup race arrangements were discussed at the meeting, and it was decided to enter into communication with foreign clubs through Secretary Butler, of the A. C. A. Mr. Pardington, who rendered so much valuable service before and during the big event last year, will co-operate actively with the other members of the racing board in planning for this year's contest. Entries will close April 15.

The meeting was presided over by Elliot C. Lee, and the others present were Dave H. Morris, president of the A. C. A.; A. R. Pardington, Long Island A. C.; George E. Farrington, A. C. of New Jersey, and C. H. Gillette, secretary of the association. Letters were received from other members regretting unavoidable absence.

## FERRY-BOAT BILL PROGRESS.

Measure Relating to Autos Passes Senate — Hearing Before House Committee.

*Special Correspondence.*

WASHINGTON, D. C., Feb. 6.—The bill permitting automobiles to be transported on ferryboats under certain conditions has been passed by the United States Senate and is now pending in the House of Representatives. The probabilities are that it will be enacted into law within the next two weeks, and will immediately become effective. The bill was passed by the Senate without a dissenting vote, but there is likely to be some opposition in the House, although not enough to defeat the bill.

Representative Goulden's bill, whose provisions have been published in THE AUTOMOBILE, came up for consideration in the Committee on the Merchant Marine and Fisheries last week. W. W. Niles, representing the Automobile Club of America, was present in behalf of automobile owners and made an effective address to the committee in advocacy of the measure. He laid special stress on the fact that the present regulations make it necessary to stop the engine in an automobile before it

can be put on a ferryboat. The work of pushing a car aboard a boat and taking it off again in the same way is arduous and causes considerable hardship to those who are compelled to use this means of transportation. The proposed law would permit automobiles to go aboard ferries under their own power, and greatly lessen the worries of an automobile owner. Mr. Niles' presentation of the automobile owners' side of the matter was listened to with much attention by the members of the committee, most of whom now see the injustice of the present regulations.

When Mr. Niles had concluded, Herbert Smith, representing the Department of Commerce and Labor, told the committee that the secretary of that department, Mr. Metcalf, while neither favoring nor objecting to the Goulden measure, wished it amended, if action was to be taken, so as to make the driver of the car punishable for failure to comply with the regulation. The chairman of the committee, General Grosvenor, took it upon himself at this point to remark that "it is safe to consider that automobile owners or drivers do not consider that they are under any law, human or divine." Of course, this caused a general laugh, much to the gratification of the venerable Grosvenor, who is always delighted to take a fling at the automobile owner.

It is expected the committee will report the bill favorably this week.

## NEW POWER BOAT CLASS.

Eastern Y. C. Promulgates Specifications to Encourage Racing.

*Special Correspondence.*

BOSTON, Feb. 6.—The Eastern Yacht Club of Marblehead, which has taken the lead in power boat racing in Massachusetts waters, has issued through its Motor Boat Race Committee the specifications for a new restricted power boat class. The committee, which is composed of Henry Howard, S. W. Sleeper, W. B. Stearns, A. Appleton Packard and William Wallace, announces that its desire is to encourage a racing class of boats which shall combine speed, safety, comfort and durability and in which competition shall be close enough for good sport. No boat is to be allowed to compete in this class without a certificate of inspection from the measurer, and no boat containing any features of design or construction which the measurer may deem unsafe will be given a certificate. The specifications of the class are as follows:

**DIMENSIONS.**—Length—The length shall not exceed 32 feet over all, including the propeller but not including the rudder or rudder stock. Beam—The maximum load water line beam shall be not less than 4 feet 2 inches, measured with the equipment and 300 pounds dead weight on board, placed substantially amidships, and fuel tanks empty.

**HORSEPOWER.**—The horsepower shall be measured by the area of the cylinders (pistons?) alone. The total cylinder area of four-cycle engines shall be 82.52 square inches (this would be four cylinders 5 1-8 inches diameter); or a total cylinder area of 61.89 square inches for two-cycle engines. The above areas may be exceeded by not more than 2 per cent.

**REVERSING GEAR.**—The boat shall be equipped with reversing gear or reversible propeller satisfactory to the measurer.

**EQUIPMENT.**—Each boat shall be equipped when racing with the following articles: One anchor weighing not less than 25

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February 11, 1905.

pounds, cable not less than 1 1-2 inch circumference not less than 30 fathoms in length, bilge pump, one pair of oars at least 8 feet long and rowlocks, one serviceable life-preserved for each person on board, sidelights and headlight as required by law, one foghorn, one spirit compass.

**AIR SPACE.**—There shall be at least 15 cubic feet of air space contained in watertight compartment or compartments, exclusive of gasoline tank.

**WEIGHT.**—Total weight (exclusive of above equipment, 300 pounds dead weight and fuel tanks empty) shall not be less than 1,800 pounds; nothing shall be removed when racing which has been included in the boat as weighed; boats must be measured at least once during a calendar year, and remeasured as often as may be deemed necessary owing to changes or alterations to hull or motor.

A series of motor boat races is being arranged by the committee to follow immediately after the completion of the long distance race from New York to Marblehead, that is to be run under the auspices of the Knickerbocker Yacht Club, the start being on July 22 next.

**JERSEY BILL TO PREVENT SPEED.***Special Correspondence.*

TRENTON, Feb. 7.—A bill to make the operation of any automobile capable of greater speed than twenty miles an hour, on any public highway in the State of New Jersey, a misdemeanor, has been introduced in the Assembly here, by Assemblyman Gibbs, and referred to the Committee on Agriculture. The text is as follows:

1. Any person driving or operating within this state in, on or upon any public place, road or highway, any motor vehicle so constructed or geared as to be capable of running at a maximum speed exceeding one mile in three minutes shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding fifty dollars, or by imprisonment in the county jail for a period not exceeding ten days, or both, in the discretion of the court.

**SAXE BILL REPORTED AT ALBANY.***Special Correspondence.*

ALBANY, Feb. 8.—Although the Saxe bill to amend the state automobile law by making imprisonment a part of the punishment for the first offense, was reported to-day from the Senate Committee on Internal Affairs of Counties, it is to be held in the Senate and sent back for a hearing before the committee on February 28. The provisions of the Saxe bill differ somewhat from those of the Wilsack bill in the Assembly, though the object sought is about the same, and the penalties are the same.

The first case brought in Ohio involving damages caused by an automobile accident, has been filed in the Supreme Court, from Franklin county. It is styled *Tabbie Swaney vs. Henry M. Neil, of Columbus*. The plaintiff in error, recovered a judgment of \$1,000 in the Common Pleas Court, which was set aside in the Circuit Court on the ground that the trial judge did not furnish interrogatories to the jury when requested. The suit is attracting much attention among automobile owners of the state, and the decision of the court will be awaited with interest.

The annual medical report of one of New York's large life insurance companies states that out of 312 fatal accidents to its policy-holders, five were caused by automobiles.

**HEARING ON AUTO BILL.****Amendment to New York Law Allows Imprisonment for First Offense.***Special Correspondence.*

ALBANY, Feb. 7.—It has been decided by the assembly committee on internal affairs of counties to give a hearing on Assemblyman Wilsack's bill, which seeks to amend the state automobile law so as to make imprisonment one of the penalties for the first infraction of the law. The bill as introduced by the member from the Second district of Queens county, reads as follows, the matter in brackets being portions of the old law omitted and that in italics being new matter:

Section 1. Subdivision one of section six of chapter five hundred and thirty-eight of the laws of nineteen hundred and four entitled "An act in relation to the registration and identification of motor vehicles and the use of the public highways by such vehicles" is hereby amended to read as follows:

1. Penalties for excessive speed, et cetera.—The violation of any of the provisions of subdivision five of section two, or of subdivision seven of section two, [or of section three] or of section five of this act, [or of any ordinance, rule or regulation adopted by local authorities in pursuance of subdivision four of section four of this act,] shall be deemed a misdemeanor, punishable by a fine not exceeding one hundred dollars for the first offence, and punishable by a fine of not less than fifty dollars nor more than one hundred dollars, or imprisonment not exceeding thirty days, or both, for a second offence, and punishable by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars, and imprisonment not exceeding thirty days for a third or subsequent offence. *The violation of any of the provisions of section three of this act or of any ordinance, rule or regulation adopted by local authorities in pursuance of subdivision four of section four of this act, shall be deemed a misdemeanor, punishable by a fine not exceeding one hundred dollars, or imprisonment not exceeding thirty days, or both, for the first offence, and punishable by a fine of not less than fifty dollars nor more than one hundred dollars, or imprisonment not exceeding thirty days, or both, for a second offence, and punishable by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars and imprisonment not exceeding thirty days for a third or subsequent offence.*

Section 2. This act shall take effect immediately.

**DELAWARE AUTO BILL.****Measure Introduced in Legislature Almost Duplicate of Pennsylvania Law.***Special Correspondence.*

WILMINGTON, DEL., Feb. 6.—A bill to regulate the use of automobiles in the state has been introduced in the Delaware Legislature, but as it is almost a duplicate of the Pennsylvania law, there are terms which are not applicable in this state, and it will have to be amended before it can be passed.

It requires every non-resident, as well as resident, tourist to have a license; provides that all owners of motor vehicles shall file, in the office of the Secretary of State, a declaration of competence to drive, together with a description of the machine, the owner, etc. A registration fee of \$1 is required, with no further license. The license number shall be displayed on each machine in letters three inches in length; each machine shall carry two lamps, with power to

throw rays 200 feet ahead, and the registration numbers shall be placed on each lamp.

The following speed limits are provided: In settlements where houses are more than 100 feet apart, a mile in six minutes; seven minutes in a city or thickly settled town; three minutes elsewhere. A licensed automobilist is to be permitted to use any public street or highway. A fine of \$100 or imprisonment for thirty days, is provided for displaying a fictitious number. Racing on a public road is prohibited, the penalty being \$50. Different penalties are provided for other violations.

**STREET RAILWAY AUTO LINES.****Bill Granting Washington Company Right to Operate Bus Lines.***Special Correspondence.*

WASHINGTON, D. C., Feb. 6.—A bill has been introduced in Congress by Representative Allen authorizing the Washington Railway & Electric Co. to operate automobiles for the transportation of passengers on such streets and highways of the District of Columbia as are not at the time of the passage of the bill occupied by any street railway. Under the terms of the bill, the rate of fare shall not exceed five cents, and tickets sold at the rate of six for twenty-five cents by street railways doing business in the District shall be received as fare. Wherever the route of one of the automobile lines connects with or intersects one of the lines of street railway operated by the same company, or one of its associate companies, free reciprocal transfers shall be issued to passengers.

The speed of the automobiles is restricted to an average of fifteen miles an hour between certain points, and eighteen miles an hour between other points.

The enactment of this bill should open up an excellent field here for the sale of large automobiles for passenger service, and serve to put Washington in the very front of cities having a regular automobile passenger service on a large scale.

**OLDSMOBILE AT SEA.***Special Correspondence.*

HONOLULU, T. H., Jan. 10.—Before the great white flyer, the American ship *Erskine M. Phelps*, is well tied up to dock in Philadelphia her crew will be ready to drop upon the dock the automobile of its master, Capt. Robert Graham. Probably for the first time since motor cars became more than a mere fad will the captain of a sailing vessel be able to attend to his business ashore with the aid of a fast machine. The *Phelps* sailed from Honolulu for Philadelphia on Sunday and the friends of her commander will be somewhat surprised if she does not complete her voyage in less than one hundred days.

During the stay of his ship in port Captain Graham became an enthusiastic motorist, and his Olds light touring car was almost constantly in use. One of the trophies which he carries back to Philadelphia is the pair of blue flags, which signify the first prize in the Thanksgiving day automobile parade. The car, made up as a Japanese tea garden, was driven by the captain in the white outing suit and helmet of a tourist, while the ladies, Mrs. and Miss Graham, Mrs. Benson and Miss Giffard, were costumed as geishas.

The car, in running condition, was crated and lowered immediately within the after hatch so that it may be slung on deck and be in readiness for instant dropping overboard. Captain Graham is an auto enthusiast and will enjoy the stay in port all the more with having his favorite car with him.

## CALIFORNIA CLUB PLANS BUSY SEASON.

Hopes to Have 500 Members When Annual Dinner Is Held February 18—Working to Secure Good Roads Out of San Francisco and to Pass State Automobile Law.

### *Special Correspondence.*

SAN FRANCISCO, Jan. 29.—The Automobile Club of California will hold its annual dinner February 18 in this city, and the affair is expected to be the most important of the kind in the history of the club. There has recently been a big boom in the club's membership and it is expected that the total number on the rolls will be at least 500 on the night of the dinner. Sixty-two names were added at the meeting of the board of governors held last week, and many new applications are already in the hands of the secretary.

At the coming dinner the club's plans for the season will be outlined, both as regards its good roads campaign and in the way of meets and runs. The good roads campaign promises to engage much of the energy of the management. Plans have already been formulated looking to improved local conditions, as well as conditions in neighboring counties. A big effort will be made to secure a good road out of San Francisco toward San Mateo and San José, on this side of the bay. On account of the poor condition of the roads leading out of San Francisco the great majority of those running to San José and other points go by way of Alameda county, taking the ferry from here. An effort will be made to change this condition.

### THE LEGISLATIVE SITUATION.

The present session of the California Legislature is expected to take some action regarding uniform automobile legislation, and a delegation from the club will leave for Sacramento in a few days with the double purpose of suggesting measures from the standpoint of the automobile owners and of trying to prevent the passage of antagonistic bills. At present each county in the state has individual laws with regard to automobiles and the lack of uniformity works great hardship in many instances.

In certain counties where some of the best roads exist there is absolutely prohibitive legislation and in others the regulations are out of all reason. In Marin county, bordering on San Francisco and containing some of the finest suburban residences in the state, as well as some of the best roads, there is a county ordinance which prohibits the use of automobiles on the public highways between the hours of sunset and sunrise. In other counties certain desirable roads have been closed to autos or have been put under prohibitive speed regulations. The Automobile Club of California has compiled all the county ordinances relating to the use of automobiles and has been endeavoring, through its legal advisers, to secure modifications from the counties themselves. The Marin county sunset law is now being tried on a test case and is at present before the Supreme Court of the state.

There is some doubt as to the possibility of securing a state law, but measures introduced independently by legislators have been talked of and it will require considerable activity to prevent pernicious legislation on the subject. A bill has just been introduced by Senator Charles M. Shortridge, of Santa Clara, which is likely to prove troublesome. Shortridge is independent and

## THE AUTOMOBILE.

erratic and, while occupying the position of humorist of the Senate, is a dangerous antagonist. His bill provides that every county shall see to the regulation of the speed of all automobiles, motorcycles and road rollers, and that the drivers thereof, all to be classed as chauffeurs, shall be licensed by the state. The bill requires that each county shall post signs along all highways in the county notifying the chauffeurs at what rate of speed their machines may be driven. The rate of speed is to be determined by the Boards of Supervisors of the several counties, and is to be computed according to the use of the roads by horse-driven vehicles and by the population of the county immediately bordering on the road. The measure further provides that all chauffeurs shall be licensed by the Secretary of State at an annual tax of \$2 for the privilege of driving a machine. The chauffeurs must be numbered, and wear, when driving, a brass badge bearing this number. The numbers must also be painted on the car and on the lamps. For breaking any sections of the law a fine of not less than \$100 or more than \$250, or thirty days' imprisonment is provided, and the bill makes the fine a lien upon the machine until paid.

### MAY OPEN SAN JOSE-SANTA CLARA ROAD.

There is a very strong chance that the next meeting of the Board of Supervisors of Santa Clara County will result in the opening of the mountain road between San Jose and Santa Cruz to automobiles. At present motorists traveling between the two cities are compelled to go by the way of Watsonville and Gilroy, a distance of eighty miles. The way over the mountain road is but thirty miles, and in addition, the road itself is one of the most picturesque in this portion of the country. Owing to the opposition of the farmers the road, which lies partly in Santa Cruz County and partly in Santa Clara County, has been closed until recently, to automobiles throughout its entire length. A short time ago, however, the Santa Cruz supervisors were induced to remove the restriction and they are now among the most insistent advocates of the opening of the road for its entire length.

C. C. Moore, a member of the executive committee of the A. C. of California, is directing the agitation in behalf of the Club, and is now in San José urging the cause of the automobile interests. The farmers are not nearly so antagonistic as formerly, while the hotel interests and those doing business directly with the large tourist class visiting these counties, are strongly in favor of the revocation of the ordinance. Some of the Santa Clara supervisors have already expressed themselves as favorable to the plan, and an effort will be made to have action taken at the next meeting of the Board. The opening of the road will be of much interest to Eastern persons who make their winter home at Del Monte and Monterey, many of whom bring their cars with them. The mountain road between the two counties is one of the finest drives in the state and the fact that it has been closed to automobiles has been a source of much regret.

A hundred miles in an hour, eighteen minutes and twenty-four seconds! That is what an automobile did on the long, floor-like beach of Ormond, Fla. People who do not like such fast traveling can stay at home or keep off the track. But those who object should remember that the earth is traveling at a very much greater rate of speed, and owing to well-kept laws thus far has avoided collisions.—*Troy (N. Y.) Times.*

## MEMBERSHIP LIMIT OF A. C. A. NOW 700.

Raised from 500 at Tuesday's Special Meeting, at Which Forty New Members Were Admitted—Resolution Passed Favoring Ferry Boat Bill—Scarritt on Legislation.

The membership limit of the Automobile Club of America was raised from 500 to 700 at a special meeting of the members held at the Fifth avenue clubhouse, Tuesday, February 7. It was at first intended to make the limit 1,000, but as this did not meet with universal approval the number was reduced to 700. Forty applicants, whose names were on the waiting list, were admitted to membership, their applications having been endorsed by the board of governors at a meeting held immediately preceding the general meeting. Among the newly elected members are Cornelius Vanderbilt, John R. Roosevelt, Percy S. Straus, A. A. Housman, L. L. Benedict, J. Borden Harriman, Charles Steele, Adolph Lewisohn, Charles F. Hoffman, H. S. Black, D. V. H. Warner, Frank Tilford, F. D. Underwood, A. T. Kemp and H. Morgenthau.

At the meeting of the board of governors the resignation of Harlan W. Whipple as a governor was accepted, and his place was filled by the election of William Pierson Hamilton. A resolution was passed strongly favoring the passage, by Congress, of the Platt-Goulden bill, the effect of which, if its passage is secured, will be to permit automobiles to drive on and off ferry boats under their own power. The bill has already passed the Senate. Dave H. Morris, president of the club, presided over both meetings.

After business had been concluded, Winthrop E. Scarritt, former president of the club, delivered an interesting and instructive lecture on the subject of legislation affecting automobiles and motorists, in which he dwelt strongly upon the injustice of singling out the automobile from all classes of vehicles to be specially marked and conspicuously placarded, and their owners or drivers made to suffer for infractions of the law which in the case of other vehicles were allowed to pass unnoticed. He believed that a just law for the regulation of the running of automobiles should provide for the revocation of the driver's license certificate for fifteen days on the first offence, for thirty days on the second offence, and for one year on further repetition; these penalties to be in addition to the regular punishments provided by the law.

He thought that public garages should be conducted under legal regulations, being compelled to take out licenses, and that no machines should be allowed to go out without the owner's presence or written consent, a record being kept of the movements of all cars and furnished to the owners. Chauffeurs, he said, should be required to take out licenses, and also to keep records of the movement of their cars and to notify the owners immediately when repairs were required.

All cars of more than 5 horsepower should have at least two brakes, one of them double acting, and no car should be permitted to run within corporate limits with muffler open, thought Mr. Scarritt, who held that speed limits should be twelve miles an hour in the thickly populated portions of corporations, eighteen miles an hour in the thinly populated districts, and thirty miles an hour in the open country. Notwithstanding these maximum rates, however, no speed greater than was consistent with safety under existing conditions should be permitted.

## ST. LOUIS TO KANSAS CITY.

**Representative Church Advocates Trunk Road Built by Convict Labor.**

*Special Correspondence.*

JEFFERSON CITY, Mo., Feb. 6.—Representative George Church, of Bates county, is at work now on a general road bill, which he will offer to the assembly in a short time. Mr. Church is a farmer who is tired of muddy roads and wants a remedy for them. Details of the bill have not been announced.

A novel plan proposed by Mr. Church contemplates the construction of a cross-state road from St. Louis to Kansas City, this road to form a link in the proposed national highway. As chairman of the house committee on roads, he is advocating the employment of convict labor in this work. His idea is to start the work from Jefferson City, where the state prison is, and continue it to St. Louis, later building the section to Kansas City. St. Louis is 94 miles from Jefferson City, while the distance from St. Louis to Kansas City is 282 miles. These distances are by rail.

It is proposed by Mr. Church to use, as far as practicable, the old trans-continent trail, by which travel moved across the state before the time of railways. Much of this trail follows the Missouri River and the grades are not very heavy. The important towns along the route are to be reached, so as to make the road local as well as cross-state.

In constructing the road, the tentative plan is to send out perhaps 200 convicts, housing them in a good camp or a portable stockade. Road material is abundant and could be secured almost adjacent to the road throughout its length. The plan is meeting with general favor and a bill along the line of this idea probably will be offered in a short time.

## UP PIKE'S PEAK IN AUGUST.

**Great Interest in Nine-Mile Ascent Shown in the East.**

*Special Correspondence.*

DENVER, Feb. 4.—The date for the Pike's Peak mountain climbing contest has been set for the last week in August. This announcement was made this week by G. A. Wahlgreen, secretary-treasurer of the Denver-Overland Racing Association, who has the matter in charge. The last week in August was selected because it does not

conflict with the dates for the Gordon Bennett and Mount Vernon events. The idea of the Pike's Peak climb is original with Mr. Wahlgreen, who has received many letters from automobile manufacturers and experts asking for further information about it. Eastern men have shown much interest in the plan and a number of drivers have signified their intention of taking part in the climb. Webb Jay and Earl Kiser are among those who have entered already. The event will be a novel one and is bound to become of national interest.

Estimates on preparing the road up Pike's Peak for the races range from \$2,000 to \$5,000, the cost depending largely upon whether the road is merely gotten into good condition for the automobiles in next August's contest, or repaired in a more substantial manner so as to be in readiness at all times should the mountain climbing prove so popular that it is made an annual occurrence. The promotor is anxious to hold the meet every year. The present carriage road up the mountain starts at the town of Cascade and winds up to the summit. The distance is nine miles and the difference in altitude from the bottom to the top of the peak is 8,000 feet. Half way up along the road is a station, known as the Halfway House, which is often made the destination of mountain climbers. During the summer season the present road is in good condition to within a mile or two of the top. Some have suggested that the first year the racers should finish at some point below the summit, but Mr. Wahlgreen believes that the autos should make the full trip.

In addition to the Pike's Peak climb, one

day of the meet will be devoted to automobile races at Overland Park, Denver. On this day the principal event will be a competitive race between Barney Oldfield and Earl Kiser. Another feature of interest will be a road race from Colorado Springs to Denver, a fifty-two mile run.

## FORD TO GO FOR RECORDS.

**Little Racer to Have New Crankshaft and Be Exhibited.**

*Special Correspondence.*

DETROIT, Feb. 6.—The Ford racer is going after the time marks just as soon as a suitable course can be secured for the performance. This determination was announced by James J. Couzens, secretary of the Ford Motor Co., last Saturday. Henry Ford is not at all discouraged by the accidental breaking of the crankshaft of his new 60-horsepower racer, that was expected to break records at Ormond. The new car was not fit to go to Ormond, as it was not completed in time, and was shipped to Florida in parts and assembled after its arrival. It had several trials after being assembled, and worked to perfection.

O. J. Mulford, who was at Ormond, says that Mr. Ford told him after one of the trials, that he had ridden the fastest mile he ever went in an automobile. Mr. Ford is much disappointed that he did not have a chance to try conclusions with the Napier car. His racer is on her way home from Florida now and will be exhibited at the local automobile show that opens February 13. In the meantime she will be taken to the factory, where a new crankshaft will be put in, and after the show she will receive a thorough testing out. Mr. Ford and Mr. Couzens are devoting their spare energies to finding a suitable course for record trials. It is thought that the trials will be made in the early part of the next summer. This will gladden the hearts of the enthusiasts who thought she would prove the star of the Ormond races.

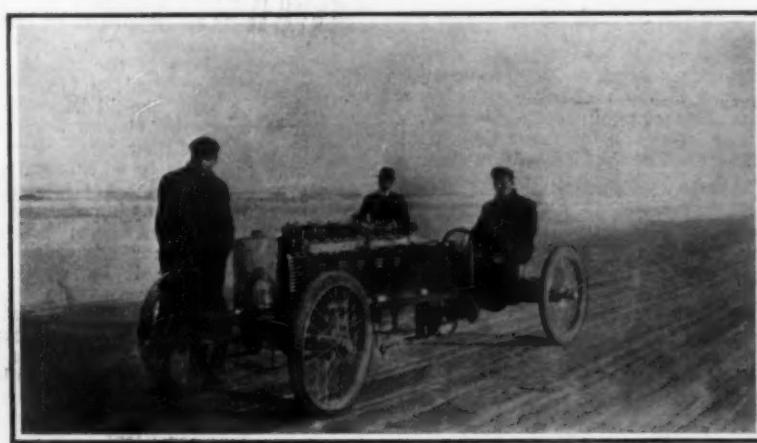
## EXPORTS FOR THE YEAR 1904.

Exports of automobiles and automobile parts from the United States for the twelve months ending with December, 1904, aggregated \$1,897,510, representing an increased valuation of \$254,481, over 1903 and \$827,728 over 1902.

The exports for December alone aggregated \$214,516.



SINUOUS ROAD UP PIKE'S PEAK, WHERE AUTO CONTEST WILL BE HELD.



NEW FORD LIGHT 60-H. P. EIGHT-CYLINDER RACER, ON ORMOND BEACH.

## AMERICAN AND FOREIGN AUTOMOBILE AND AUTO-BOAT FIXTURES.

- Feb. 4-11.—Fifth Annual Automobile Exhibition, Chicago. Coliseum Building. N. A. M. and C. A. C.  
 Feb. 4-19.—Automobile Exhibition at Berlin, Germany.  
 Feb. 5-19.—Automobile Week, Nice, France.  
 Feb. 9-11.—Automobile and Power Boat Races, Havana, Cuba.  
 Feb. 10-18.—Automobile Exhibition, at Olympia, London, England. Society of Motor Manufacturers and Traders.  
 Feb. 13-18.—Fourth Annual Exhibition at Detroit. Tri-State Automobile and Sporting Goods Association.  
 Feb. 21-March 9.—National Motor Boat Show, Madison Square Garden, New York. Nat. Assn. Engine and Boat Mfrs.  
 Feb. 18-25.—Cleveland Automobile Show. Cleveland Automobile Club.  
 Feb. 24-March 4.—Edinburgh Automobile Show.  
 Feb. 24—Manchester Automobile Show opens.
- Feb. 27-March 4.—Automobile Exhibition, Toronto, Canada.  
 March 3-11.—Motor Show, Liverpool, England.  
 March 6-12.—Third Annual Buffalo Automobile Show, Convention Hall, Buffalo. Buffalo Automobile Club.  
 March 13-18.—Third Annual Automobile Show, Boston. Boston Automobile Dealers' Assn.  
 March 13-18.—Importers' Automobile Salon, Symphony Hall, Boston.  
 March 18-25.—Cordingley's Tenth Annual Motor Car Exhibition, Agricultural Hall, London, England.  
 March 27-April 5.—Fifth Annual Washington Automobile Show. Washington Auto. Dealers' Assn.  
 April 1.—Light Van Trials. A. C. of Great Britain.  
 April 2-16.—Monaco Motor Boat Fortnight.  
 May 11-25.—Stockholm Automobile Show.  
 June 26.—Mont Cenis Hill Climb.

## TRUCK COMPANY FORMED

American Coulthard Company Building  
Fifty Wagons After English Drawings.

*Special Correspondence.*

BOSTON, Jan. 6.—Active operations are just being commenced by the newly formed American Coulthard Company in the manufacture in America, of the well-known Coulthard steam truck, which has met with much success in Great Britain. The new company is operating under the American rights and patents, which were owned by John Gardner, of Boston. It is capitalized at \$300,000, the backers being prominent capitalists of Minneapolis, in which city the headquarters are located. Walter N. Carroll, a banker of Minneapolis, is president of the company; John Gardner is vice-president; Eben S. Martin, of Minneapolis, secretary, and G. Hives Dawson consulting engineer. Mr. Dawson for a long time was connected with the Coulthard works in England, and he has the original English working drawings. These have been redrawn to meet American standards, and the company will soon put its product on the market.

For the present the main working quarters of the company will be in Boston, and a contract has been entered into with the Vaughn Machine Company, of Peabody, Mass., for the construction of fifty trucks. These will be placed mostly in New England. It is claimed that this steam truck has many advantages for heavy traction in this country. About 200 trucks are in operation in England, and it has been computed that the cost of operation has been between 6 and 7 cents per ton mile. So far only one of the Coulthard trucks has been in use in this country, and that has proved successful, having secured highest award in the trials of commercial vehicles conducted by the Automobile Club of America. In England the Coulthard truck has won in practically every contest it has entered.

## WHITE GARAGE IN BOSTON.

Modern Three-Story Brick Building in  
Back Bay Being Remodeled.

*Special Correspondence.*

BOSTON, Feb. 6.—Boston's garage facilities are to have a notable addition in about a month, when the new garage and salesroom of the White Sewing Machine Company, at the corner of Newbury and Hereford streets will probably be ready for occupancy. A few days ago the company purchased a large modern brick stable, three stories in height, and the plans for its remodeling have already been prepared. The garage, when it is finished, will be one of the best in the city. Its location is in the

heart of the Back Bay, in a section that has heretofore been occupied almost exclusively by private stables. It is easily accessible to the main thoroughfares used by automobileists leading either into the suburbs from the central part of the city.

It is expected that on March 1, the automobile department of the company will be removed to the new quarters from the present inadequate rooms in Odd Fellows Building on Berkeley street. When the improvements that have been planned under the direction of Manager George H. Lowe are completed, there will be on the ground floor a large storage space for machines in constant use. On this floor, also, will be located the superintendent's office and a reception and waiting room for ladies. In the basement below, will be more storage room, washing facilities, lockers for chauffeurs and the heating apparatus for the plant. From the basement automobile and passenger elevators will reach the other floors. The second floor is to be devoted to the general offices, the office of the manager, stock room, storage room and salesroom. The salesroom will be in the front of the building, in a well-lighted apartment. The repair department will occupy the third floor.

## RAMBLER SHERIDAN ROAD GARAGE.

The accompanying reproduction of an architect's sketch shows the proposed garage and salesrooms to be erected by Thos. B. Jeffery & Co., on the Sheridan road, in Chicago, within a short distance of the Sheridan road express station of the Northwestern Elevated railroad. The new building will be 60 by 121 feet in size, and will accommodate about 100 cars.

The first floor will be divided into salesrooms and waiting-room. In the salesrooms will be displayed all models of Rambler cars for 1905, and a large line of auto-

mobile accessories and supplies. On the second floor will be located a large repair department and storage room. The establishment will be kept open day and night throughout the season for the accommodation of Rambler patrons and all other motorists needing garage services.

## DRAWBACK ON RE-EXPORTED TIRES.

*Special Correspondence.*

WASHINGTON, D. C., Feb. 6.—The Treasury Department has issued its first drawback regulation affecting automobiles. In a communication to the Collector of Customs at New York the Secretary of the Treasury authorizes him to allow, on the exportation of automobiles manufactured by the Locomobile Co. of America, at Bridgeport, Conn., with the use of imported rubber tires to which valves of domestic manufacture are fitted, a drawback equal in amount to the duty paid on the imported rubber tires so used, less the legal deduction of 1 per cent.

It is provided that the preliminary entry must show the marks and numbers of the shipping packages and the contents of each package separately and in the entire shipment. The drawback entry must show the total number of automobiles with imported rubber tires attached thereto exported, describing the tires as they are described in the import invoice or invoices and, in addition to the usual averments, that the automobiles were manufactured of materials and in the manner set forth in the manufacturers' sworn statement of November 25, 1904, a copy of which is on file in the collector's office in New York.

In liquidation the number of tires which may be taken as the basis for allowance of drawback may equal the number declared in the drawback entry after official verification of exported quantities.



RAMBLER STORE AND GARAGE TO BE BUILT ON SHERIDAN ROAD, CHICAGO.



Chevalier René de Knyff, the French racing automobilist, arrived in New York on February 1, having made the journey in the interests of the firm of Panhard & Levassor, of Paris, with which he is connected. M. de Knyff expects to repeat his visit annually, and expresses himself as much pleased with the condition of the automobile business on this side of the Atlantic. He is a member of the racing board of the Automobile Club of France, and naturally considered that organization was doing quite right in proposing to make the Gordon Bennett race divide the honors with the Grand Prix.

Illustrated prospectuses giving information concerning the proposed Atlantic Coast Motor Speedway, described in the last issue of THE AUTOMOBILE, have been issued by the general manager of the enterprise, W. J. Morgan, 116 Nassau St., New York City, from whom further details may be obtained. A drawing of the proposed track shows a triangle with the corners formed into easy curves of 2,000 feet radius, and the straights a mile long. Opposite the center of the base of the triangle, and close to the proposed railway station, is shown a two-mile circular speedway.

The Thousand Island Yacht Club has challenged the Chippewa Yacht Club for the American Power Boat Association trophy, a gold loving cup, which is open to international competition, and named as challenger the *Standard*. The trophy will be defended by the *Vingt-et-Un*, which won the cup from the Columbia Yacht Club of New York in September last, racing under the colors of the Chippewa Club. A thirty-mile course is now being laid off on the St. Lawrence for the race, which is expected to occur August 24, 25 and 26, next.

Mr. and Mrs. W. K. Vanderbilt, Sr., and Mr. and Mrs. W. K. Vanderbilt, Jr., sailed on the *Deutschland* on Tuesday, February 7, for Europe. The famous young automobilist and his wife will spend the summer in and about Paris, and automobiling will occupy much of their time. They will return in the early autumn. On the same ship was Sir Thomas Dewar, who is returning to England after having been an interested spectator of the automobile races on the Florida beach, and the launch races at Palm Beach.

In the United States Circuit Court for the Southern District of New York, the Electric Storage Battery Company, of Philadelphia, on February 4, filed a bill accompanied by a motion for a preliminary injunction against the National Battery Company for alleged infringement of the Exide battery plate, made under the Bradbury-Stone patent, which is owned by the Electric Storage Battery Company. This is for the staggered or cage type of grid, which has proved the most satisfactory type in use.

Evidence of the extent to which the Fisk mechanically fastened tire has "caught on," is indicated by the fact that the Fisk factory at Chicopee Falls, Mass., last week began to work twenty-two hours out of the twenty-four. This was made necessary despite the fact that only last month the Fisk people took possession of a new four-story addition to their plant, 45 by 120 feet. At the same time they moved into their new shipping and office building, which is a three-story structure 87 by 45 feet, the office

occupying one of the floors. The original factory building, which is still in use, is of three stories, 50 by 150 feet.

The Continental Caoutchouc Co. calls attention to the fact that every winning car in every race at Ormond on January 20, was equipped with Continental tires. Among them was the De Dietrich, which won the 100-mile race. The Renault and the F. I. A. T. cars, which were second and third respectively in that event, also used Continental tires, as did the winners of the 50-mile Ormond handicap, the 10-mile race, the 5-mile race for the Brokaw Cup and the 5-mile Ormond Handicap.

The Madison Square Garden automobile show in New York City resulted very satisfactorily for the Welch Motor Car Co., of Pontiac, Mich., and the Pontiac Body Co., of the same place. The former concern sold several cars and the latter secured large contracts for automobile body work. The Pontiac Body Co. has discontinued the building of carriage bodies, which was formerly its chief business, and now builds automobile bodies exclusively.

At a meeting of the stockholders of the Lozier Motor Co., of New York, held on January 21, it was decided to increase its capital stock from \$500,000 to \$1,100,000. More than \$500,000 of the new stock was immediately subscribed, and will be issued on March 1. The company still retains the services of George A. Burwell, superintendent, and a number of designers and engineers, who were with it in the old bicycle days.

At the present session of the State Legislature there will be presented by the Board of Directors of the Reading (Pa.) Road Drivers' Association, a bill requiring vehicles weighing from 1,500 to 3,000 pounds to be fitted with three-inch tires, and those of greater capacity, with four-inch tires. Such a measure will have the unqualified endorsement of automobilists throughout the state.

The Auto Mart, of New York City, has been incorporated with a capital of \$100,000, to conduct a general automobile business—selling, storing, repairing and renting cars. John H. Mueller is president and treasurer; Joseph S. Dibley, vice-president; J. M. Collins, secretary. The new concern will be ready for business about March 1, at Seventh Avenue and Thirty-seventh street.

The Kirk Mfg. Co., manufacturer of the Yale automobile, will be represented in New York City by Frank A. Sanford, of Brooklyn, who has placed an order for a number of cars and is making arrangements for a location near the heart of the automobile district.

George Collister, secretary of the Cleveland show, is providing space for a number of additional exhibitors, utilizing the armory and storeroom at the Grays Armory. There will be half again as many exhibitors this year as there were last year.

In our issue of January 28, page 91 of the Advertising Section, the words "Staggered Gang Fin Radiators" appeared in the advertisement of the Briscoe Mfg. Co. This was a compositor's error, and should have read "Staggered Gang Fin Radiators."

The automobile bill now before the Legislature of Indiana, and which is expected to become a law, provides a speed limit of

twenty miles an hour in the country districts, eight miles in cities, and, in addition, prohibits machines of non-residents from entering the state without first having secured a license from the Secretary of State of Indiana.

Ramon Camano, head of the firm representing the Oldsmobile in Buenos Ayres, Argentine Republic, recently made a trip from that city to the Pacific coast of Chile in an Oldsmobile light tonneau, crossing the Andes and reaching an altitude of 13,000 feet above the level of the sea. The trip is reported to have been a complete success, no serious mishaps having occurred.

Secretary Seneca G. Lewis, Tri-State Sportsmen's Association, which will hold the Detroit auto show from February 13 to 18 inclusive, has opened negotiations with some of the factories that had cars in the recent Ormond beach races, with the result that some of these cars will be on exhibition at the Light Guard armory.

J. F. Bertsch, for the past five years purchasing agent and manager of the automobile department of the Iver Johnson Co., of Boston, has severed his connection with that company and accepted a similar position with the accessories department of the Boston branch of Thos. B. Jeffery & Co.

The Orlando F. Weber Co., of Chicago, has just occupied its new quarters at 1322-26 Michigan avenue, where it will handle a full line of Pope and Buick cars. The new store has a frontage of 60 feet, is 170 feet deep and two stories in height. A fully equipped repair shop will also be conducted.

E. C. Johnson, of the White Sewing Machine Company, has taken charge of the selling interests of the White with the Quaker City Automobile Company, at Philadelphia. Mr. Johnson had charge of the White exhibit at St. Louis during the World's Fair season, where he was very successful.

The Michelin Tire American Agency, Inc., announces that it is the only direct American representative of the French firm of Michelin et Cie, controlling all shipments of Michelin tires, and guaranteeing full protection to users of Michelin tires from suits for infringement of patents.

A local automobile show will be held in Denver about April 10 and dealers and automobile owners are preparing to make it a big event. The show will be held in Coliseum Hall, the largest in Denver, and will continue five days.

The Vanderbilt Cup Race for 1905 will in all probability be held on the course that was used last year, as it is Mr. Vanderbilt's desire that the race should be on Long Island, and the course selected is the best one in that district.

Through an error, the advertisement of the A. L. Dyke Auto Supply Co.'s "Diseases of Gasoline Automobiles, and How to Cure Them" in THE AUTOMOBILE for January 14 and February 4, made the price read \$2.50. The correct price is \$1.50 postpaid.

A new garage and salesroom has been opened in Newark, N. J., by Emerson & Turner at 222 Halsey St., where there is an available floor space of about 10,000 square feet. The machine shop will be complete and up-to-date in its equipment.